Final
Environmental Impact Report

2016 Campus Master Plan

California State University San Bernardino,
Palm Desert Campus

CSUSB
PALM DESERT CAMPUS

December 2017

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California State University San Bernardino, Palm Desert Campus

December 2017

State Clearinghouse # 2017011059

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Summary

This Program Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Section 15000 et seq.) to analyze the potential significant impacts associated with the California State University, San Bernardino, Palm Desert Campus 2016 Campus Master Plan project.

The Project

The project is the adoption and implementation of the California State University, San Bernardino (CSUSB or University), Palm Desert Campus (PDC) 2016 Campus Master Plan (Master Plan). The Palm Desert campus currently serves as an off-campus center for the California State University San Bernardino main campus and helps to reinforce the University's mission and its educational processes. The current Master Plan, adopted in 2000, provided for campus facilities accommodating up to 2,500 full-time equivalent (FTE) students. The 2016 Master Plan provides a framework for implementation of the University's goals and programs, by identifying needed facilities and improvements to accommodate a gradual growth in student enrollment projected to reach 8,000 FTEs by 2035.

The University conducted a wide-ranging planning process that included students and community stakeholders to develop the Master Plan. The aim was to develop a comprehensive plan that will transform the existing campus from a commuter campus into a complete campus community with the mix of functions appropriate for an institution of higher education, one that attracts students and faculty, and provides for the higher education needs of the Coachella Valley. Thus, the Master Plan provides for development of a full-service campus community with state of the art academic facilities, student housing, dining facilities, and other amenities that support a vibrant 24/7 live-learn-work-play campus life. To accomplish this, the Master Plan also incorporates Design Guidelines, Landscape Design Guidelines, and Sustainability Guidelines for the campus.

Master Plan Objectives

The main objective of the Master Plan is to guide the development of the Palm Desert campus (PDC) over the next 20 years to accommodate gradual student enrollment growth to 8,000 (FTE) students while reinforcing the University's strengths and supporting the University's mandate to provide high-quality education to a larger student body. To do so, the Master Plan creates a physical campus environment that facilitates the University's ability to achieve the following objectives:

- Provide academic facilities and accommodate campus growth to a capacity of 8,000 FTE students
- Support students, faculty and staff with appropriate learning, research, recreation and administrative facilities
- Serve as a regional center for intellectual, cultural and life-long learning
- Reinforce the CSUSB's active learning focus by providing opportunities for interactions and collaborations among students, faculty, staff and the greater community
- Support the creation of a range of student learning/research/business incubator type spaces through public-private and public-public partnerships
- Continue to collaborate with local institutions to fully integrate the campus into the physical, social, economic fabric of the local community
- Attract international students to the PDC
- Reinforce positive intrinsic features of the PDC campus site including views to the Indio Hills to the northeast and views of the campus from the I-10 freeway and from off-campus neighborhoods
- Make efficient use of developable campus land and preserve a balance between built-up areas and open space
- Create a series of campus outdoor spaces framed by buildings and protected from extremes of sun and wind that facilitate student interaction, student learning and passive recreation
- Provide appropriate facilities for informal and organized recreation and intercollegiate athletics
- Provide facilities for campus-based and campus controlled student housing to support the campus life and learning experiences for the full range of university students
- Support the creation of residential learning communities on the campus; support the continued use of the campus by commuting students
- Serve as an accessible, safe and attractive campus for students, staff, faculty and the community
- Promote social and economic equity, provide for a range of ways for students and the community to access the campus and its facilities including public transportation and distance learning
- Conserve natural resources while creating and fostering an environmentally, socially and economically sustainable physical and operational campus
- Through a comprehensive approach to sustainability, deepen the stewardship of Palm Desert Campus landscape resources and the local natural environment

Project Location

The CSU San Bernardino Palm Desert 169.4-acre campus is part of a rapidly developing portion of the City of Palm Desert within the Coachella Valley. The existing campus development consists of four buildings within an approximately 55-acre campus area, south of the Cook Street and Berger Drive intersection and north of University of California, Riverside (UCR) Graduate Center and Frank Sinatra Drive.

The campus is separated from the existing surrounding residential neighborhoods to the south by University of Riverside, Palm Desert campus and Frank Sinatra Drive, and to the west by Cook Street. Gerald Ford Drive bounds north of the campus and east as it curves southward.

Master Plan Characteristics

The Master Plan provides concentrates campus development within an approximately 85-acre compact area at the southwestern corner of the PDC campus land, incorporating the existing PDC campus facilities and structuring the bulk of campus growth eastwards. The remaining campus area will remain as unlandscaped open space.

Major features of the Master Plan include:

- Creating a central pedestrian plaza linking the existing campus to new planned development to the east
- Organizing new academic buildings to form the "Palm Canyon Walk" as the central east-west pedestrian promenade expanding the academic core
- Promoting multi-disciplinary shared academic buildings to accommodate future program growth and new teaching methodologies
- Providing student housing to promote a 24/7 campus environment
- Strategically locating new parking lots surrounding the academic core which facilitates easy transition between parking and campus grounds (planned to accommodate parking structures in the long term)
- Enhancing the main campus entry at Berger Circle Drive West with new signage, landscaping, and campus housing to enhance the campus entry identity
- Providing sustainability initiatives to protect and conserve campus and community resources

To accommodate the projected future campus student enrollment within the new framework, the Master Plan provides for campus development with approximately 1.21 million gross square feet of needed new facilities and improvements over the next 20 years. The future development focuses on the facilities needed by the University's academic programs; campus life programs, including student housing, recreation, and facilities maintenance; and campus infrastructure, including parking.

Academic Facilities: To accommodate the projected future campus student enrollment, the Master Plan calls for the development of 8 to 10 new academic buildings of approximately 408,000 square feet over the next 20 years. The buildings will be strategically placed within the core campus area along a new pedestrian promenade to create a more dense walkable campus.

In addition to instructional buildings, the 2016 Master Plan provides for the following core facilities needed to create a fully functioning campus – in particular a campus that fully supports and attracts students.

Library/Media Center with approximately 71,000 square feet of space made available to students and faculty. The library will be located near the Coyote Plaza and will provide study areas, computer lounges, information resources, food service, meeting rooms, faculty and student offices, and other instructional space for the University's academic programs.

Student Housing providing approximately 616 beds in new residence halls. In general, a basic residence hall unit will consist of a double bedroom but to provide greater flexibility, each residence hall pod or wing will also include single bedrooms for resident advisors. Each wing will also have its own study room and will share a lounge/ living room space with its associated adjacent wing. The new student housing will be supported with nearby dining halls, student support spaces, and other amenities. Since there is more than adequate land available for major campus facilities, student housing could be increased if demand warranted.

Student Union and Dining Commons with approximately 75,000 square feet will provide meeting space, food services, student meeting rooms, student lounge and club rooms, a bookstore, and other related student support functions.

Student Education and Wellness Center with approximately 105,000 square feet of physical education space located at the eastern end of the pedestrian promenade, to serve both physical education programs, such as Kinesiology and Gerontology, as well as student recreation needs. The center will include a physical education building with gymnasium, lockers, workout rooms, faculty offices and a Student Recreation/Wellness building with fitness rooms, weight rooms, dance, an outdoor pool and other exercise facilities that support student health and wellness.

Physical Education Facilities with playfields provided in two locations: two soccer fields and a future track/soccer field with bleachers near the Physical Education center; and in an area north of Berger Circle Drive that will include two additional soccer fields, regulation size baseball and softball fields, and tennis courts.

Administrative and Maintenance Facilities: Approximately 130,000 square feet of instructional, administrative and maintenance facilities are planned to serve the growing student population and the new facilities, including a new, approximately 26,500 square-foot physical plant on campus.

Parking: Approximately 4,000 new parking spaces are planned to be located to the north and south of the campus core, generally keeping vehicles to the periphery of the campus while allowing easy access into the pedestrian areas of the campus. The Master Plan provides for parking in surface lots and for parking structures to be constructed on those surface lots in the future.

Open Space and Landscape: The Master Plan identifies principal landscape zones that collectively contribute to the overall organization and open space structure of the campus providing some of the primary character-defining qualities of the campus. The landscape zones include primary and secondary gateways, streetscapes, plazas, pedestrian promenades, quads and corridors and athletic facilities. As a whole, the goal is to create a holistic and consistent open space environment that unifies, connects, and brands the student, faculty, staff, and visitor

experience of the Palm Desert campus to create an attractive, distinctly memorable unique sense of place. This includes a centralized pedestrian promenade which connects the Cook Street entry to the eastern campus edge and athletic facilities.

Open space is planned with covered shading to provide shelter from heat and seasonal desert wind. Architectural design guidelines such as using dense land use strategies, group buildings, and providing pedestrian-oriented open space and integrated outdoor space are used to provide protection from intense heat. Strategies to improve outdoor thermal comfort include shade trees, wind breakers, evaporative cooling towers, and green surfaces in walls, floors, and roofs. The network of strategies will be organized so that they provide cooler areas in multiple locations along outdoor spaces by combining these strategies.

Infrastructure: The Master Plan provides for campus infrastructure that includes roadways, parking, and utilities. This includes pedestrian and bicycle networks that will serve as a unique organizing spine of the campus with a variety of pedestrian oriented amenities such as solar shade structures, sheltered study pavilions, enhanced landscape, periodic food carts or venues, shaded seated areas equipped with Wi-Fi which, together with the entry lobbies of new academic buildings, will create a vibrant active link through the campus core. The Master Plan also provides for modifications and augmentations of the campus utilities systems to serve the new facilities.

Connectivity: The Master Plan provides for a number of improvements to better connect the campus internally and with the surrounding neighborhood and community. Connectivity improvements include supporting the use of public transit by continuing to provide shuttle connections, bus stops and parking for University and regional transit vehicles; enhancing campus entries and roadways to improve the flow of on-campus traffic; adding parking facilities to better accommodate on-campus traffic; organizing a pedestrian pathway system to create a more integrated and aesthetically-pleasing campus; restructuring bicycle routes through the campus and identifying bicycle and pedestrian zones that increase safety and functionality; and improving signage and wayfinding to make it easier for visitors to navigate throughout the campus.

Design Guidelines: All new facilities will be developed using the Master Plan Design Guidelines. The guidelines provide design direction for the new campus and future architecture to ensure new building development with up to five-story facilities consistently connects with the existing buildings, circulation networks, and the natural landscape. They identify methods to promote a cohesive environment between new buildings, existing buildings, and new campus' landscape to help unify the campus visual environment by establishing measurable strategies to provide design direction for future architects, landscape architects, and/or designers. The design guidelines help plan for parking facilities, campus residential areas, as well as for site designs, including site features and furnishings. The guidelines also comprehensively address wayfinding and signage for the campus to enhance and create a distinct image for the campus.

Landscape Guidelines: The new and enhanced landscape and open spaces on campus will be developed building on the campus' natural setting and character. This includes the use of drought-tolerant, indigenous native species throughout all landscaping, central pedestrian spine

and other pedestrian promenades that connect new facilities, reinforced open spaces for recreation, expanded quads, dining halls, and plazas.

Sustainability Guidelines: Sustainability guidelines will help pave the way toward a more attractive and interactive campus and will increase stewardship of the campus environment. The Master Plan builds upon the University's policies and initiatives by providing both the framework and the specific guidelines for the campus efficient energy use and water conservation. The Master Plan also introduces campus waste and stormwater management, sustainable building practices, and water targets, as well as community resilience plans.

Environmental Impacts

CSU San Bernardino prepared this EIR to analyze the potential environmental impacts associated with the Master Plan project. In addition, the EIR identifies mitigation measures capable of avoiding or substantially reducing significant impacts. A summary of environmental impacts, mitigation measures, and a level of impact remaining after mitigation is presented in Table S-1 at the end of this Summary.

The analysis contained in this EIR uses words "significant" and "less than significant" in the discussion of impact. These words specifically define the degree of impact and parallel language used in CEQA Guidelines. As required by CEQA, mitigation measures have been identified in this EIR to avoid or substantially reduce the level of potentially significant adverse impacts to the greatest extent possible. Certain significant impacts, even with the inclusion of mitigation measures, cannot be reduced to a level below significance. Such impacts are identified as "unavoidable significant impacts."

Beneficial Impacts

This EIR identifies the following environmental effects of the Master Plan that are beneficial:

- Creating a more sustainable and resilient campus
- Enhancing aesthetics and visual character of the campus
- Improving campus' pedestrian and bicycle connections and circulation
- Reducing per-person vehicle miles travelled (VMTs)

Impacts Considered and Found to be Less Than Significant

The analysis contained in the EIR indicates that the project will not result in a significant impact with respect to the following:

- Biological resources
- Historic resources
- Police and fire protection services
- Utilities and service systems

- Cumulative effects on fire and police protection services, public utility and service systems, biological resources, cultural resources, and aesthetics
- Short-term construction-related impact on water quality
- Growth-inducing and significant irreversible effects

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project (refer to Appendix A). The Initial Study concluded that implementation of the Master Plan will result in either no impact or a less than significant impact with regards to:

- Agricultural and forest resources
- Geology and soils
- Hazards and hazardous materials
- Hydrology
- Land use and planning
- Mineral resources
- Population and housing
- Recreation

Potentially Significant Impacts that Can Be Mitigated

The EIR analysis identified the following potentially significant impact associated with the Master Plan that can be mitigated to less than significant levels.

- Impact on potentially inadvertently discovered paleontological and archaeological resources and Native American and/or tribal cultural resources
- Project-specific and cumulative traffic impact on Cook Street and University Park Drive/Berger Drive
- Construction-related impact on solid waste facilities and hazardous waste
- Short-term and intermittent construction-related traffic effects

Unavoidable Significant Impacts

The CEQA Guidelines define a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance" (Section 15382). In order to approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project against its unavoidable significant effects, and has concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered "acceptable" (CEQA Guidelines, Section 15093[a]).

The EIR identifies the following unavoidable significant impacts associated with implementation of the Master Plan:

- Project-specific and cumulative operational air quality impact
- Project-specific and cumulative traffic impact on I-10 freeway
- Project-specific and cumulative traffic noise impact at two study roadway segments along Frank Sinatra Drive, between Portola Avenue and Cook Street and between Cook Street and Gerald Ford Drive
- Short-term and intermittent construction-related project-specific and cumulative air quality and noise impacts

Alternatives to the Project

The alternatives to the Master Plan considered include the following:

Alternative 1: "No Project" – Continuation of Current Master Plan alternative, required by CEQA
Alternative 2: Smaller Facility Development
Alternative 3: More Student Housing on Campus

Among the alternatives considered, none of the alternatives discussed is considered clearly environmentally superior to the project. Each alternative results in potential impacts, with a number of impacts that may be greater and some impacts that may be lesser than those associated with the Master Plan. Overall, the More Student Housing on Campus alternative could be considered environmentally superior to the project because it would reduce the magnitude of significant unavoidable traffic, long-term air quality, and traffic noise impacts, and would increase the beneficial effect of reducing student commute trips and associated vehicle miles travelled. However, since funding for tripling the amount of student housing on campus over the life of the Master Plan is not in place, this alternative may not be fiscally viable at this time.

Issues Identified During the NOP Process

No areas of controversy were identified during the Notice of Preparation (NOP) process. In response to the NOP, certain issues were raised by public agencies and these issues are addressed in the EIR as follows:

- Native American and tribal resources (addressed in Section 3.3)
- Water supply (addressed in Section 3.8)

Mitigation Monitoring Program

In accordance with CEQA Section 21081.6, a mitigation monitoring program will be adopted by the Board of Trustees of the California State University if the Master Plan is approved. The mitigation monitoring program will be prepared as a separate document and will be designed to

ensure compliance with the adopted mitigation measures contained in the Final EIR. The program will be available for public review prior to Board of Trustees' actions on the Master Plan.

Summary of Impacts

Table S-1 summarizes the environmental effects associated with implementation of the Master Plan, the mitigation measures required to avoid or minimize adverse impact, and the level of impact remaining after full implementation of identified mitigation measures.

Table S-1
Summary of Environmental Impacts and Mitigation Measures

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Beneficial Impacts			
Sustainability and Resilience	The Master Plan builds upon the University's sustainability policies and initiatives by providing the framework, specific recommendations, and future goals for the campus' stormwater runoff and waste management, energy and water conservation, reduction of greenhouse gases emissions, and aligning the University's new buildings with LEED Gold-equivalent criteria.	Impact will be beneficial, no mitigation is required.	Impact will be beneficial, no mitigation is required.
Aesthetics	The Master Plan will result in enhancing the visual and aesthetic campus character and quality. With the Master Plan's Design Guidelines, Landscape Guidelines, and Sustainability Guidelines, the new facilities, landscaping, open space, signage, and other elements will create visual appearance of the campus that is both distinct, cohesive and integrated with the natural local desert setting.	Impact will be beneficial, no mitigation is required.	Impact will be beneficial, no mitigation is required.
Pedestrian and Bicycle Circulation	The Master Plan will result in expanded pedestrian and bicycle networks on campus that will improve walkability and connectivity. The project does not disrupt any existing or planned bicycle, pedestrian, or transit facilities; nor does the project conflict with any plans, guidelines, policies, or standards related to these modes.	Impact will be beneficial, no mitigation is required.	Impact will be beneficial, no mitigation is required.
Vehicles miles traveled (VMT) per person	By providing on-campus housing for students, the Master Plan will result in reducing overall VMT rate per FTE student.	Impact will be beneficial, no mitigation is required.	Impact will be beneficial, no mitigation is required.

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Impacts Considered But Found To Be Less Than Significant (CEQA Guidelines Section 15128)			
Biological Resources	The project area is not located within any USFWS-designated critical habitat or any habitat conservation plan. There are no wetlands, riparian habitats, or established native resident or migratory wildlife corridors within the project area. Due to the developed and highly disturbed nature of the project area, and its location within a greater urbanized area, none of special-status plant or animal species, including the Coachella Valley fringed-toed lizard, were found or are expected to be found within the project area due to the lack of suitable habitat.	Impact will be less than significant, and no mitigation is required.	Impact will be less than significant, and no mitigation is required.
Historic Resources (project-specific and cumulative)	The existing campus facilities will not be affected by future campus development, except for a small, approximately 1,300 square feet expansion of the existing theater building. Since none of the existing buildings is an identified historic resource, the campus development pursuant to the Master Plan will not result in an impact to historic resources.	Impact will be less than significant, and no mitigation is required.	Impact will be less than significant, and no mitigation is required.
Fire and Police Protection Services (project-specific and cumulative)	The gradual growth in student enrollment and facilities on campus with the implementation of the Master Plan will result in incremental increase in demand for fire and police protection services. However, it will not result in the need for new fire or police protection facilities. The City of Palm Desert is currently planning to construct a new fire station adjacent to the campus to serve future new development in the area. The Master Plan includes a new	Impact will be less than significant, and no mitigation is required.	Impact will be less than significant, and no mitigation is required.

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	University Police and Transportation Office, which will be appropriately staffed with University Police personnel. With the additional facilities, the enhanced operating procedures, incorporation of required fire suppression and safety features, continued emergency response training, and compliance with all applicable existing regulations, requirements, and procedures, impact will be less than significant.		
Utilities and Service Systems (project-specific and cumulative)	The Coachella Valley Water District determined that there will be sufficient water supplies to meet the campus water demand, as well as the demand of other future development within the CVWD service area. Furthermore, the Master Plan's Water Sustainability Guidelines include a wide range of water conservation programs and measures, with high water efficiency in indoor building design and in landscape design. Water saving strategies include using no potable water for non-potable uses, using recycled and reclaimed water for irrigation (on drought tolerant landscaping), and using high water conserving plumbing fixtures, which conserve water and reduce wastewater generation. The Master Plan's sustainability features and measures include reducing stormwater generation through the use of bioswales, additional quads and other permeable spaces, use of permeable materials, and other features to capture runoff. The University's commitment to a campus-wide consolidated waste management program has resulted in diverting up to 61% of waste from landfills through recycling and other waste diversion	The existing utilities infrastructure on campus will be expanded and improved as necessary to serve the new facilities and improvements developed pursuant to the Master Plan. With implementation of the Master Plan's sustainability guidelines in future campus development, compliance with existing requirements, and payment of all legally required capital facilities fees pursuant to and in compliance with the California Government Code Section 54999, impact on the regional public utilities systems and infrastructure will be less than significant.	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	measures. This waste reduction and diversion is anticipated to continue to grow consistent with the State law of diverting at least 75%, and the California State University's goal of diverting 80% of waste by 2020.		
Short-term construction effects on water quality	Construction of new facilities and improvements will proceed in compliance with current regulations that require design and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which includes implementation of Best Management Practices (BMPs) throughout construction to reduce impacts on water quality.	With compliance of existing regulations, including implementation of BMPs in all construction of new facilities and improvements on campus, impact will be less than significant, and no mitigation is required.	Less than significant
Growth-Inducing impacts	The Master Plan is designed to accommodate additional students generated by future growth within the Coachella Valley region and beyond, and thus by itself will not induce population growth in the region, or foster growth beyond the growth already anticipated in the region.	Impact will be less than significant, and no mitigation is required.	Less than significant
Significant Environmental Impacts That Can Be Avoided or Mitigated (CEQA Guidelines Section 15126.4)			
Traffic impact on study intersections (project-specific and cumulative)	Traffic generated by campus future growth together with cumulative future traffic growth will result in a significant impact at the intersection at Cook Street & University Park Drive/Berger Drive.	1. A fair-share contribution will be made to the City of Palm Desert toward the following improvement at the time conditions warrant the improvement. Optimize signal timing to accommodate the increased traffic flow.	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
Cultural Resources	***Archaeological Resources*** None of the archaeological resources identified within the project area through the CHRIS records search and an intensive-level pedestrian survey of the Master Plan planning area are eligible for the California Register of Historic Resources and therefore, the campus development pursuant to the Master Plan will not impact known archaeological resource. However, mitigation measures are identified to minimize any potential impact associated with previously unknown archaeological resources.	***Archaeological Resources*** 1. If previously unknown archaeological resources are encountered during any phase of construction of the future planned facilities and improvements, the following measures will be implemented: 1.1 *Inadvertent Discoveries*. If previously unknown buried cultural deposits are encountered during any phase of project construction, all construction work within 60 feet of the deposit will cease and a qualified archaeologist shall be consulted to assess the find. If the discovery is determined to be Native American in origin, the project archaeologist will consult with CSUSB Palm Desert to continue Native American consultation procedures. As part of this process, it may be determined that a Native American monitor will be required. If the discovery is determined to be not significant, work will be permitted to continue in the area. If a discovery is determined to be significant, a mitigation plan should be prepared and carried out in accordance with state guidelines. If the resource cannot be avoided, a data recovery plan should be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions. Any cultural material collected as part of an assessment or data recovery effort should be curated at a qualified facility. Field notes and other pertinent materials should be curated along with the	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		archaeological collection.	
	Native American and/or Tribal Cultural Resources	***Native American and/or Tribal Cultural Resources***	
	A search of the Sacred Lands Files by the Native American Heritage Commission (NAHC) did not identify the presence of Native American cultural resources within the project area. However, since the Native American contact program resulted in information that project area may have sensitivity for Native American and/or tribal cultural resources, mitigation measures have been identified to ensure that future campus development pursuant to the Master Plan will not significantly affect the previously unknown Native American and/or tribal cultural resources.	2. If previously unknown Native American cultural resources or tribal cultural resources are encountered during any phase of construction of the future planned facilities and improvements, the following measures will be implemented: 2.1 All work in the immediate vicinity of the find (within a 60-foot buffer) will cease and (1) a qualified archaeologist meeting the Secretary of Interior (SOI) standards will assess the find, and (2) Agua Caliente Band of Cahuilla Indians will be contacted and provided information about the find and invited to perform a site visit when the archeologist makes the assessment to provide Tribal input. 2.2 If significant Native American resource is discovered and avoidance cannot be ensured, an SOI-qualified archeologist will be retained to develop a cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, which will be provided to the Agua Caliente Band of Cahuilla Indians for review and comment. 2.3 All in-field investigations, assessments, and/or data recovery enacted pursuant to the final Treatment Plan will be monitored by the Agua Caliente Band of Cahuilla Indians Tribal Participant(s). 2.4 The University will consult in good faith with Agua Caliente Band of Cahuilla Indians on the dispositions and treatment of any artifacts or cultural resources	

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		encountered during any phase of construction of the future planned facilities and improvements. 2.5 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner will be contacted pursuant to State Health and Safety Code §7050.5 and Public Resources Code Section 5097.98 and that code enforced for the duration of the project.	
	Paleontological Resources There are no known paleontological resources within the project area. However, the campus soils may be underlain by the older Pleistocene sediments which have a well-known history of fossil preservation throughout Southern California, including the region surrounding the project area. Thus, there is a possibility that scientifically significant fossil specimens could be uncovered by construction activity in the project area. Therefore, mitigation measures have been identified to ensure that future campus development pursuant to the Master Plan will not significantly affect previously unknown paleontological resources.	***Paleontological Resources*** 3. Paleontological monitoring is recommended at locations where construction excavation in these deposits will exceed a depth of 5 feet deep and might impact underlying sediments with high paleontological sensitivity. As construction proceeds at any given location within the project area, the Project Paleontologist may re-evaluate the sensitivity of the subsurface and the level of monitoring required (for example, after 25% of the excavation work has been completed). Without the presence of certain fossil taxa, it is generally infeasible to determine the age of sediments (Holocene versus Pleistocene) in the field with any degree of accuracy. Therefore, decisions concerning the depth at which paleontological monitoring is warranted are necessarily based on geologic observations, inference, and the possible paleontological sensitivity in relation to depth. 3.1 A professional paleontologist will be retained by the University to develop a Paleontological Mitigation and Monitoring Plan for the	

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		project. 3.2 Based on the results of this analysis, there are no fossils on the ground surface within the project area, and only a low likelihood that fossils are present in the shallow subsurface. Construction activities that exceed a depth of 5 feet will have a higher likelihood of adversely impacting scientifically significant paleontological resources. Therefore, excavations that exceed 5 feet in depth throughout the project area will be monitored for paleontological resources by a qualified paleontologist, in accordance with the professional standards of the SVP (2010). Should the monitoring results of initial project work (i.e., after 25% of excavation work is completed at any given location within the project area) indicate that the paleontological sensitivity of the subsurface sediments within that portion of the project area is lower than anticipated, the monitoring level of effort will be decreased accordingly, as determined by the Project Paleontologist. If the monitoring results indicate that the paleontological sensitivity of the subsurface sediments within portions of the project area are higher than anticipated, the monitoring level of effort will continue or increase accordingly. 3.3 If any subsurface fossils are encountered during construction and a paleontological monitor is not present, a qualified paleontologist will be notified immediately, and work in the immediate area (within 50 feet) of the discovery will cease until the significance of	

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		the discovery can be evaluated.	
Construction-related impact on solid waste facilities	Construction of new facilities and associated infrastructure improvements will generate construction materials waste. Even though the construction of individual campus facilities and infrastructure improvements will be phased over the 20-year span of the Master Plan - thus representing relatively small amount of construction at any given time which does not involve generating significant amounts of solid waste, mitigation measures have been identified to reduce this potential impact.	Construction inert materials, including vegetative matter, asphalt, concrete, and other recyclable materials will be recycled to the extent feasible.	Less than significant
Short-term and intermittent construction-related traffic effects	Construction activities on campus will involve the use of trucks, usually for short periods of time, to haul away construction debris and deliver construction materials. These trucks and equipment may cause localized congestion at some locations in the surrounding area, which is a potentially significant impact if not properly mitigated. Due to the pedestrian character of the campus with students walking from one building to another throughout the day, construction activity for specific facilities could adversely affect pedestrian flows in some areas of the campus.	The University will implement the following mitigation measures to reduce significant impacts by imposing conditions on the construction contractor. 1. A flag person will be employed as needed to direct traffic when heavy construction vehicles enter the campus 2. Construction trucks will avoid travel on residential areas to access campus and use the City of Palm Desert designated truck routes to travel to and from campus. 3. Construction-related truck traffic will be scheduled to avoid peak travel time on the I-10 freeway as feasible. 4. If major pedestrian or bicycle routes on campus are temporarily blocked by construction activities, alternate routes around construction areas will be provided, to the extent feasible. These alternate routes will be posted on campus for the duration of construction.	Less than significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		5. If any bus stop on campus is obstructed by construction activity, the University, in cooperation with the transit service providers, will temporarily relocate such transit facility on campus as appropriate.	
Unavoidable Significant Environmental Impacts (CEQA Guidelines Section 15126[b] – Lead Agency must issue a "Statement of Overriding Considerations" under CEQA Guidelines Section 15093 if the Agency determines these effects are significant and approves the project.)			
Air Quality (project-specific and cumulative)	Long-term operational emissions of NOx could exceed the SCAQMD daily threshold amounts.	The Master Plan provides for continuing use of the campus for educational purposes to accommodate planned future area-wide growth in student population. The Master Plan will provide student housing on campus, which will work to reduce student commuter trips on the existing roadway networks. The Master Plan is consistent with SCAG's growth projections and land use policies, including the policies of focusing growth and development within urban areas, encouraging infill development, and encouraging sustainable development that contributes to reducing adverse air quality and GHG impacts. The University implements, and will continue to implement pursuant to the Master Plan numerous programs and policies to improve air quality in the region, including providing housing for more than 600 students on campus that reduce commute trips and the associated air pollutant emissions, and minimizing energy use through project design, increased efficiencies equivalent to the LEED gold standard in new facilities, use of renewable energy sources, and improving walkability design and pedestrian network on campus. Therefore,	Significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		the Master Plan is both supportive of the regional air quality management plan (AQMP) goals and objectives and consistent with the AQMP. In addition, the following measures will be implemented: ▪ Consider the use of electric leaf blowers ▪ Consider providing the appropriate infrastructure to facilitate sufficient electric charging for vehicles to plug-in by installing 240-Volt electrical outlets or Level 2 chargers in parking lots enabling charging of NEVs and/or battery powered vehicles	
Noise (project-specific and cumulative)	The cumulative traffic noise impact along Frank Sinatra Drive, at Portola Avenue to Cook Street and the project-related and cumulative traffic noise impact along Frank Sinatra Drive, at Cook Street to Gerald Ford Drive will remain significant and unavoidable.	As most of the residential areas already have 6 to 8-foot noise barriers in place to help reduce traffic noise, no additional direct feasible mitigation measures are available to reduce the project-related traffic noise impact.	Significant
Traffic on I-10 freeway (project-specific and cumulative)	Traffic associated with the Master Plan and future area-wide traffic growth will result in significant impact at eight segments of I-10 freeway.	To mitigate the identified significant impacts to the freeway mainline segments would require a complete reconstruction of the I-10 freeway to add travel lanes and upgrade the deficient ramp locations. Since the freeways in the study area are interconnected systems, it would not be possible, nor effective, to provide isolated spot improvements of one segment of the freeway where deficient operations are observed. An additional mixed-flow travel lane has been proposed in both directions along I-10 between	Significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		Monterey Avenue and Dillon Road according to the 2012 SCAG Regional Transportation Plan (RTP), but is no longer proposed under the 2016 SCAG RTP. These lanes would improve traffic conditions along the corridor, but would still result in deficient operations according to Caltrans methodology and impact thresholds. As such, this impact is considered to be significant and unavoidable.	
Short-term construction-related air quality (project-specific and cumulative)	During construction, short-term air quality impact will result from worker travel, construction equipment and activities – including dust emissions that may exceed SCAQMD daily threshold amount for reactive organic gases (ROG) since at certain times some construction activities may overlap over the life of the Master Plan. The combined effect of these peak day construction-related emissions from the project together with construction emissions from other future development off campus will likely exceed SCAQMD daily threshold amounts for air pollutants.	All construction activities will proceed in compliance with the SCAQMD Rule 403 – Fugitive Dust and Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources, which includes preparation and implementation of the SCAQMD-approved Fugitive Dust Control Plan specifying the Best Management Practices and control measures that will be used during construction, such as watering exposed surfaces, applying soil stabilizers to disturbed inactive areas, quickly replacing ground cover in inactive areas, covering all stockpiles with tarps or plastic sheeting; watering all unpaved haul roads; reducing speed on unpaved to below 15 miles per hour; and ceasing grading and other high-dust activities during high wind conditions, among many others. In addition, the University will implement the following mitigation measures to reduce identified significant impacts by imposing conditions on the construction contractor. 1. Diesel particulate filters are installed on diesel equipment and trucks.	Significant

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		2. All construction equipment will be properly tuned. 3. To reduce emissions from idling, the contractor shall ensure that all equipment and vehicles not in use for more than 5 minutes are turned off, whenever feasible. 4. Architectural coatings with no more than 50 grams/liter of VOC that are in compliance with SCAQMD Rule 1113 – Architectural Coatings, will be utilized. 5. Construction of new facilities will utilize materials that do not require painting or will utilize pre-painted construction materials to the extent feasible. 6. Low VOC-content asphalt and concrete will be utilized to the extent possible. 7. The University will continue to comply with SCAQMD Rule 1403 (Asbestos Emissions from Renovation/ Demolition Activities) and other pertinent regulations when working on structures containing asbestos, lead, or other toxic materials. The University will implement the following measures to protect students present at campus. 8. As appropriate, outdoor activities at the campus will be limited during high-dust and other heavy construction activities, including painting. 9. Throughout the construction period of individual facilities and improvements in close proximity to student residence	

	Potential Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
		halls, campus academic facilities, health and wellness facilities, and/or other sensitive uses on campus, ventilation systems in those facilities will be tested more frequently to provide for the maintenance schedule that ensures proper ventilation.	
Short-term construction-related noise (project-specific and cumulative)	The impact of noise from construction activity on the campus' closest sensitive uses in the vicinity of some construction sites of new facilities, albeit reduced and intermittent, could remain significant and unavoidable.	1. Muffled heavy construction equipment will be used. 2. Construction staging areas will be located as far as possible from student residence halls, campus academic facilities, health and wellness facilities, and other places where students gather. 3. The contractor will ensure that each piece of operating equipment is in good working condition and that noise suppression features, such as engine mufflers and enclosures, are working and fitted properly. 4. The contractor will locate noisy construction equipment as far as possible from nearby sensitive uses. 5. Construction hours will be consistent with the City of Palm Desert's Construction Work Hours which prohibits construction activities on weekdays from 5:30 PM to 7:00 AM between the months of October and April and from 7:00 PM to 6:00 AM between the months of May and September. Construction is prohibited from 5:00 PM to 8:00 AM every Saturday and is not allowed on Sundays and government holidays.	Significant

1.0 Introduction

Purpose of the EIR

This Program Environmental Impact Report (EIR) has been prepared to evaluate the environmental effects of the adoption and implementation of the proposed California State University, San Bernardino (CSU San Bernardino or University), Palm Desert Campus 2016 Master Plan. The 2016 Master Plan (Master Plan) constitutes a project for the purposes of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines.

According to the CEQA Guidelines, an "EIR is an informational document which will inform public agencies, decision makers, and the public generally of the significant environmental effects of a project on the environment, identify possible ways to minimize the significant effects, and describe alternatives to the project." This Draft EIR is an informational document to be used by decision makers, public agencies, and the general public. It is not a policy document of CSU San Bernardino.

The EIR will be used by CSU San Bernardino in assessing impacts of the proposed project. During the project implementation process, mitigation measures identified in the EIR may be applied to the project by CSU San Bernardino and/or other involved agencies.

Program EIR

This document is a Program EIR prepared pursuant to the provisions of Section 15168 of the CEQA Guidelines. A Program EIR is an EIR prepared on a series of actions that can be characterized as one large project. The project consists of a series of physical and programmatic actions and improvements pursuant to the Master Plan implemented over time to the year 2035 planning horizon.

A Program EIR allows later activities, i.e. a subsequent actions and improvements, to be approved provided that the effects of such projects were examined in the Program EIR, and no new effect could occur or no new mitigation measure would be required upon implementation of such subsequent action or improvement. At the time that each facility improvement or other action pursuant to the Master Plan is carried forward, CSU San Bernardino will review each individual action or improvement to determine whether the Program EIR fully addressed the potential impacts and identified appropriate mitigation measures. If so, no further review will be required.

Legal Requirements

This EIR has been prepared in accordance with the California Environmental Quality Act of 1970 (Public Resources Code, Section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) published by the Public Resources Agency of the State of California (California Code of Regulations, Title 14, Section 15000 et seq.), and in accordance with the CSU CEQA Guidelines. The Board of Trustees of the California State University is the lead agency for this EIR, as defined in Section 21067 of CEQA.

Notice of Preparation and Initial Study

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project. The Initial Study concluded that the project might have a significant effect on the environment. The Initial Study checklist is included in Appendix A of this EIR. A Notice of Preparation (NOP) for this EIR was issued by the University on October 10, 2016 in accordance with the requirements of the CEQA Guidelines Sections 15082(a) and 15375. The NOP indicated that an EIR was being prepared and invited comments on the project from public agencies and the general public.

Draft EIR Public Review and Comment

The Draft EIR was circulated for a 45-day public review from October 12, 2017 to November 27, 2017. The public was invited to comment in writing on the information contained in the document. Persons and agencies commenting were encouraged to provide information that they believe was missing from the Draft EIR, or to identify where the information could be obtained.

Final EIR

All comments letters received during the public review on the Draft EIR and responses to the comments are included in Chapter 6.0, Responses to Comments, of this Final EIR. Appropriate revisions to the Draft EIR in response to comments and information received are identified by shading the clarified or updated text in the Final EIR, as illustrated in this sentence.

This EIR was prepared by environmental planning consultants under contract to CSU San Bernardino and under the direction of University staff.

Scope of the Project

The project is the 2016 Master Plan for Palm Desert Campus (PDC) that provides a framework for implementation of the University's goals and programs, by identifying needed facilities and improvements to accommodate a gradual growth in student enrollment projected to reach 8,000 full-time equivalent (FTE) students by 2035. The Master Plan builds upon the existing campus and incorporates portions of the circular roadway system to facilitate a transition to the new organizational pattern for the approximately 85-acre campus area planned for development

pursuant to the Master Plan. The remaining campus area will remain as an unlandscaped open space. The Master Plan's organizational pattern consists of a series of functional and geographical land use zones linked by a clearly defined and enhanced pedestrian network.

Overall, the comprehensive 2016 Master Plan provides for the development of new academic, library, and campus life facilities; revised vehicle and pedestrian access, circulation and parking; enhanced open space and landscape; new student housing; athletic and recreation facilities; and establishes a sustainability framework for the campus facilities and functions to create a resilient, sustainable campus.

Scope of the Environmental Analysis

Pursuant to CEQA and the CEQA Guidelines, an Initial Study was prepared for this project. The Initial Study concluded that the Master Plan might have a significant effect on the environment with respect to the following environmental issue areas:

- Aesthetics
- Air quality
- Biological resources
- Cultural resources
- Greenhouse gases
- Hydrology and water quality
- Noise
- Public services
- Traffic and circulation
- Utilities and service systems

All these issues are addressed in this EIR in the appropriate section. Appendix A contains the Initial Study and NOP for the project. Appendix B contains cultural resources reports, Appendix C contains the traffic study, and Appendix D contains the air quality worksheets. All other reference documents cited in the EIR are on file with CSU San Bernardino Facilities Planning and Construction Services, 5500 University Parkway San Bernardino, CA 92407-2393.

Intended Uses of the EIR

The Campus Master Plan and subsequent implementing actions are subject to review and approval by the Board of Trustees of the California State University. This EIR may also be used to provide information to other agencies for their discretionary actions related to the project implementation. The following actions are anticipated to be required for the project:

- CSU Board of Trustees
  Approval and adoption of the 2016 Master Plan
  Approval of public-public and public-private partnerships
  Approval of conceptual and schematic plans for future facilities and improvements

- City of Palm Desert
  Approval of any improvements within the City rights-of-way

- Coachella Valley Water District
  Approval of new connections and/or increase in quantity of water delivery to campus
  Approval of new connections and/or increase in quantity of wastewater, as needed
  Approval of new connections and/or increase in quantity of stormwater, as needed

- Regional Water Quality Control Board
  Compliance with MS4 stormwater permit
  Issuance of Construction Storm Water General Permit for construction of new facilities

- State Fire Marshall
  Fire safety review and approval of future facilities and improvements

- Division of State Architect
  Approval of accessibility for future facilities

- Others, as may be necessary

Contact Person

The primary contact person regarding information presented in this Draft EIR is Hamid U. Azhand, Director, Facilities Planning, Design and Construction, 5500 University Parkway San Bernardino, CA 92407-2393; fax (909) 537-5989; email: HAzhand@csusb.edu.

2.0 Project Description

The Project

The project is the adoption and implementation of the California State University San Bernardino (CSU San Bernardino or University) Palm Desert Campus 2016 Master Plan (Master Plan). The current Master Plan provided for campus facilities accommodating 2,500 full-time equivalent (FTE)[1] student enrollment level. The 2016 Master Plan provides a framework for implementation of the University's goals and programs, by identifying needed facilities and improvements to accommodate a gradual growth in student enrollment projected to reach 8,000 FTEs by 2035. Currently, the University's enrollment has already reached 1,200 FTEs, or approximately 1,400 headcount students[2].

Project Objectives

The main objective of the Master Plan is to guide the development of the Palm Desert campus (PDC) over the next 20 years to accommodate gradual student enrollment growth to 8,000 (FTE) students while reinforcing the University's strengths and supporting the University's mandate to provide high-quality education to a larger student body. To do so, the Master Plan creates a physical campus environment that facilitates the University's ability to achieve the following objectives:

- Provide academic facilities and accommodate campus growth to a capacity of 8,000 FTE students
- Support students, faculty and staff with appropriate learning, research recreation and administrative facilities
- Serve as a regional center for intellectual, cultural and life-long learning
- Reinforce the CSUSB's active learning focus by providing opportunities for interactions and collaborations among students, faculty, staff and the greater community
- Support the creation of a range of student learning/research/business incubator type spaces through public-private and public-public partnerships
- Continue to collaborate with local institutions to fully integrate the campus into the physical, social, economic fabric of the local community
- Attract international students to the PDC
- Reinforce positive intrinsic features of the PDC campus site including views to the Indio Hills to the northeast and views of the campus from the I-10 freeway and from off-campus neighborhoods

[1]FTE means "full-time equivalency" for the purposes of full-time enrolled students. The student enrollment level of 1,200 FTE students equates to 1,400 headcount students since it includes part-time students, on and off-campus on-line students, and other students.
[2]www.pdc.csusb.edu/aboutPDC

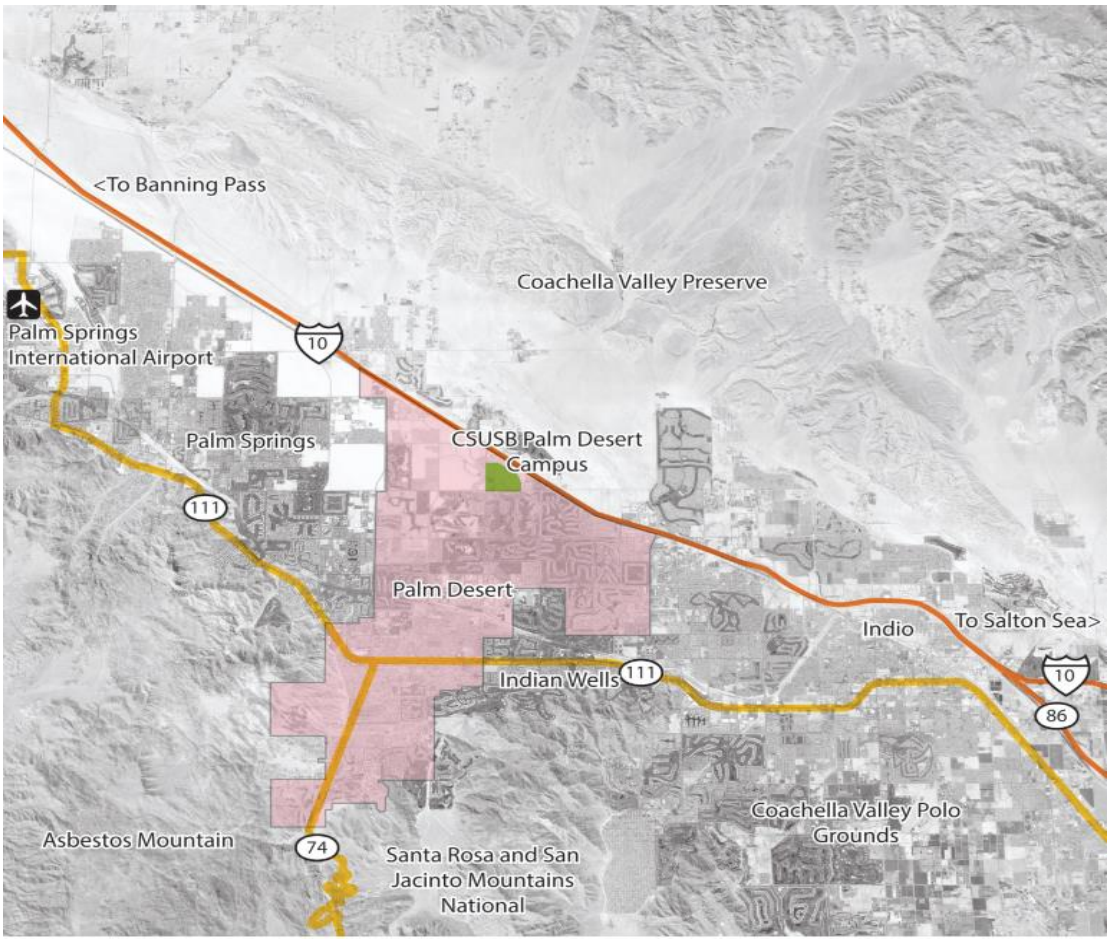
- Make efficient use of developable campus land and preserve a balance between built-up areas and open space
- Create a series of campus outdoor spaces framed by buildings and protected from extremes of sun and wind that facilitate student interaction, student learning and passive recreation
- Provide appropriate facilities for informal and organized recreation and intercollegiate athletics
- Provide facilities for campus-based and campus controlled student housing to support the campus life and learning experiences for the full range of university students
- Support the creation of residential learning communities on the campus; support the continued use of the campus by commuting students
- Serve as an accessible, safe and attractive campus for students, staff, faculty and the community
- Promote social and economic equity, provide for a range of ways for students and the community to access the campus and its facilities including public transportation and distance learning
- Conserve natural resources while creating and fostering an environmentally, socially and economically sustainable physical and operational campus
- Through a comprehensive approach to sustainability, deepen the stewardship of Palm Desert Campus landscape resources and the local natural environment

Project Location and Surrounding Uses

The CSU San Bernardino Palm Desert 169.4-acre campus is part of a rapidly developing portion of the City of Palm Desert within the Coachella Valley.

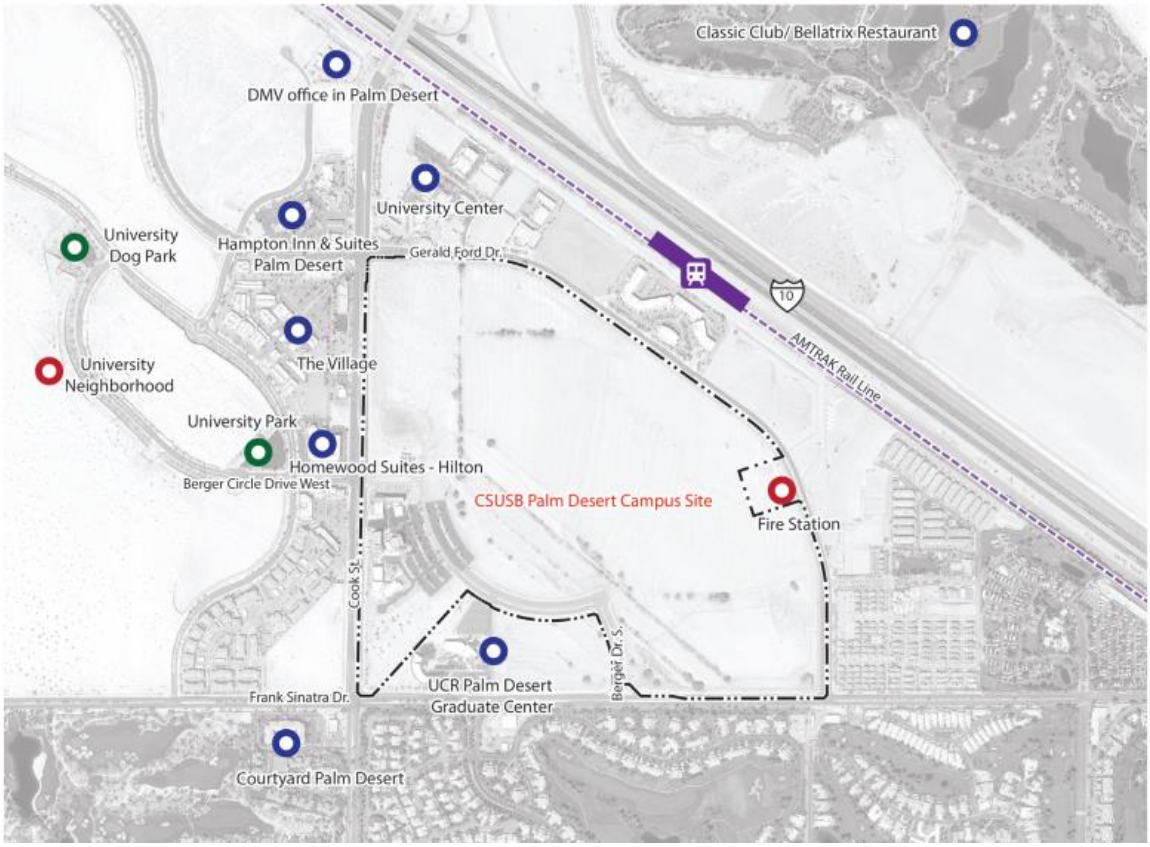
The existing campus development consists of four buildings within an approximately 55-acre campus area, south of the Cook Street and Berger Drive intersection and north of University of California, Riverside (UCR) Graduate Center and Frank Sinatra Drive. The campus has direct accessibility from the I-10 freeway at Cook Street (see Figure 1). The off-campus uses closest to the campus consist of a predominately residential development to the south and southeast. Commercial uses are located to the north and northwest of the campus. To the northeast, a strip of light industrial land fronting on Gerald Ford Drive separates the campus from the I-10 freeway. The commercial areas to the north, northwest, and west serve local neighborhoods, the campus, UCR Graduate Center, and travelers along the I-10 freeway. To the northeast, immediately north of the I-10 freeway is the regionally important Classic Club golf course (see Figure 2).

Figure 1
Project Location



Source: 2016 Master Plan

Figure 2
Surrounding Land Uses



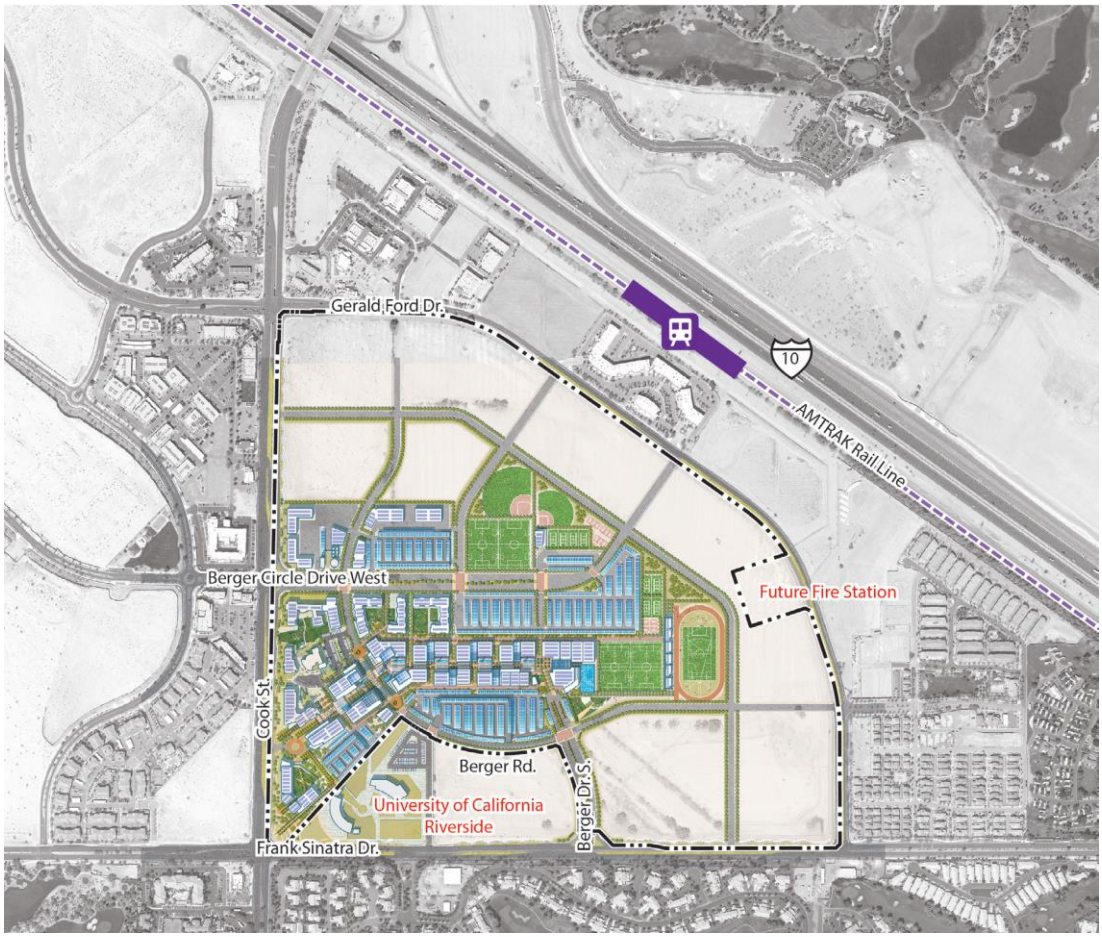
Source: 2016 Master Plan

Project Characteristics

Development Framework

As illustrated in Figure 3, the Master Plan concentrates campus development within an approximately 85-acre compact area at the southwestern corner of the PDC campus land, incorporating the existing PDC campus facilities and structuring the bulk of campus growth eastwards. The remaining campus area will remain as an unlandscaped open space.

Figure 3
Master Plan Campus Framework



Source: 2016 Master Plan

Key Features

The Master Plan incorporates a series of central features that will gradually transform the campus over the next 20 years. These features were formulated and designed in response to

Master Plan objectives and specific needs identified throughout the comprehensive Master Plan development process guided by a Master Plan Steering Committee represented by faculty, administration, students and staff, and includes input from the campus community and stakeholders through an extensive series of Town Hall Meetings.

These features include:

- Creating a central pedestrian plaza linking the existing campus to new planned development to the east
- Organizing new academic buildings to form the "Palm Canyon Walk" as the central east-west pedestrian promenade expanding the academic core
- Promoting multi-disciplinary shared academic buildings to accommodate future program growth and new teaching methodologies
- Providing student housing to promote a 24/7 campus environment
- Strategically locating new parking lots surrounding the academic core which facilitates easy transition between parking and campus grounds (planned to accommodate parking structures in the long term)
- Enhancing the main campus entry at Berger Circle Drive West with new signage, landscaping, and campus housing to enhance the campus entry identity
- Providing sustainability initiatives to protect and conserve campus and community resources

With these features, the Master Plan is intended to transform the existing Palm Desert campus from a commuter-oriented campus into a complete campus community with the mix of functions appropriate for an institution of higher education, one that attracts students and faculty, and provides for the higher education needs of the Coachella Valley.

Land Use Zones

To do so, the Master Plan builds upon the existing campus and incorporates portions of the circular roadway system to facilitate a transition to the new organizational pattern for the approximately 85-acre campus area planned for development pursuant to the Master Plan. Figure 4 illustrates this organizational pattern which provides a basic structure for the future development, consisting of a series of functional and geographical land use zones linked by a clearly defined and enhanced pedestrian network. The major land use zones are summarized below.

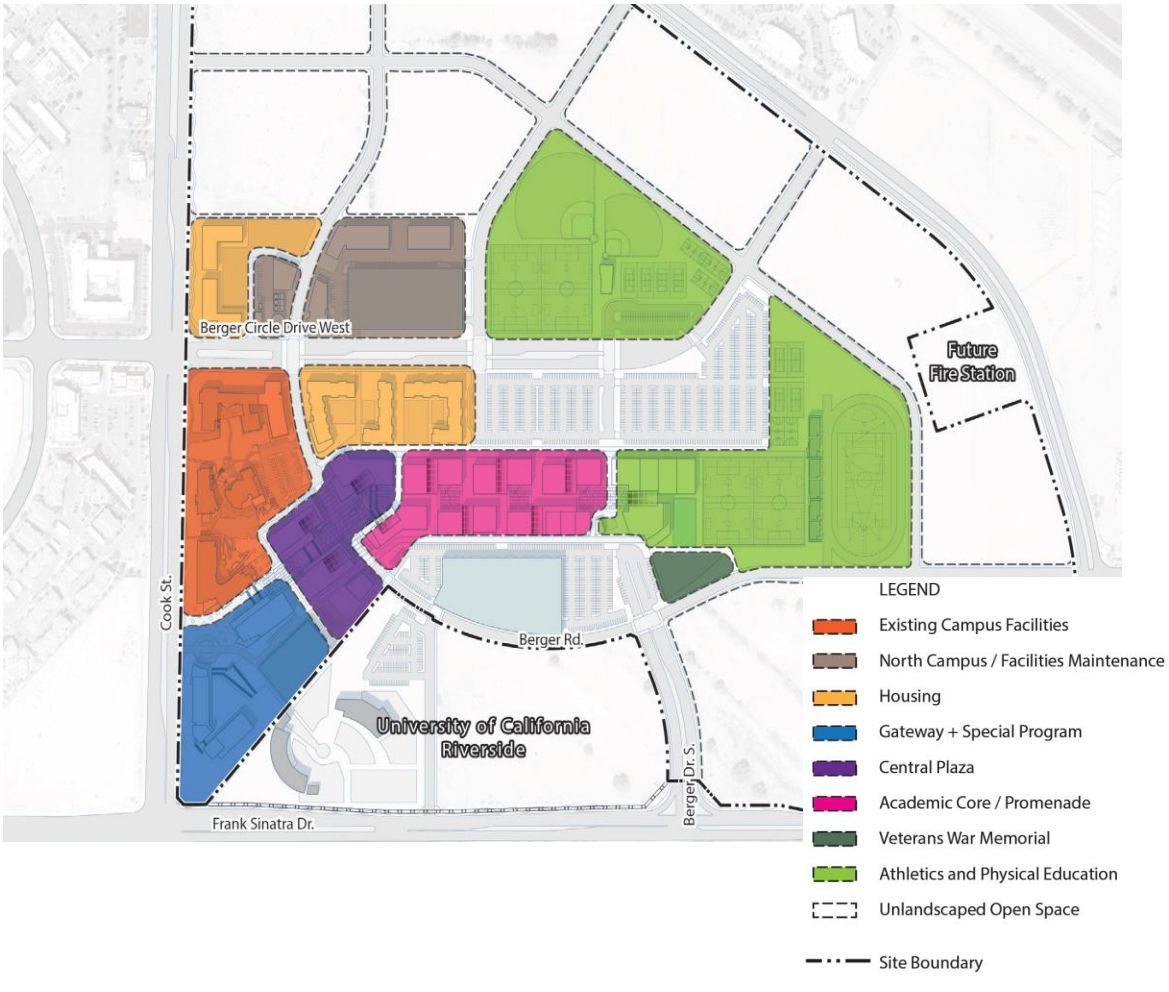
A new Central Plaza Zone is planned to be located adjacent to the existing campus and will serve as a transition zone as the future campus growth direction is shifted both to the east and to the southwest towards the intersection of Cook Street and Frank Sinatra Drive. This New Central Plaza will incorporate a portion of the existing circular drive and become pedestrian in character with enhanced paving, landscape, and shade structures. The roadway will be outfitted with removable bollards to allow for service and/or emergency access. To integrate student housing into the campus core, a new Housing Zone has been located just north of the Central Plaza.

From the Central Plaza to the east is the planned Academic and Promenade Zone focused on "Palm Canyon Walk" which terminates with a new Athletics and Physical Education Zone. At the southwest corner of this zone, a special area has been set aside for a Veteran's Memorial. Parking areas are provided to the north and south offering convenient access to all these functions.

A new Gateway and Special Programs Zone is planned to link the central plaza to the intersection of Cook Street and Frank Sinatra Drive, and creating an opportunity for a signature building to brand the campus at this prominent crossroads within the City of Palm Desert.

A new North Campus/Facilities Maintenance Zone and future parking has been placed north of Berger Circle Drive, together with additional area for student housing.

Figure 4
Campus Land Use Zones



Source: 2016 Master Plan

Campus Connectivity

The Master Plan provides for functional and geographical adjacencies maximizing connectivity within the campus, including:

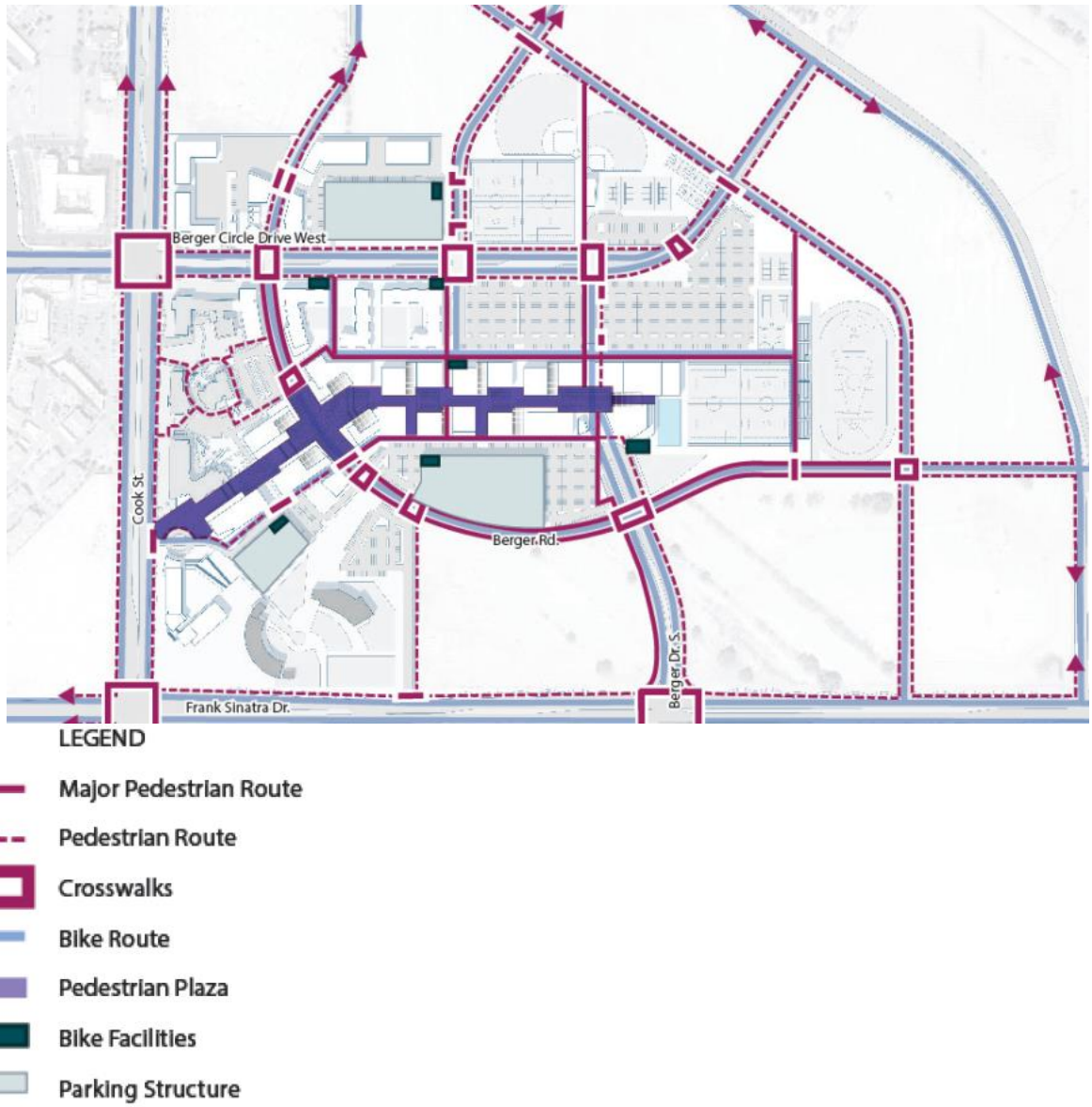
- Providing pedestrian and bicycle routes within the campus, including planned "Palm Canyon Walk" to become the central pedestrian promenade within the campus linking the Cook Street entry to the eastern edge of the campus and athletic facilities
- Following the City of Palm Desert University Specific Plan, promoting street networks on the Palm Desert campus, future campus growth, and connectivity to surrounding neighborhoods
- Enhancing main campus access with road extensions on Berger Circle Drive, Berger Road, and other links to Gerald Ford Drive
- Refining and redirect roadway system to improve access and reduce vehicle intrusion into the campus core
- Locating parking lot and future structures to distribute traffic and connect major pedestrian pathways towards the campus
- Locating new parking lots surrounding the core to facilitate easy transition from parking to the campus, and to accommodate to future parking structures
- Emphasizing future transit use and other traffic demand management strategies as alternatives to auto for campus access
- Designating bicycle pathways and bicycle parking facilities to support increased bicycle use

Figures 5 and 6 illustrate the transportation and pedestrian/bicycle framework plans for the campus, and Figure 7 illustrates planned parking on campus.

Figure 5
Transportation and Service Network

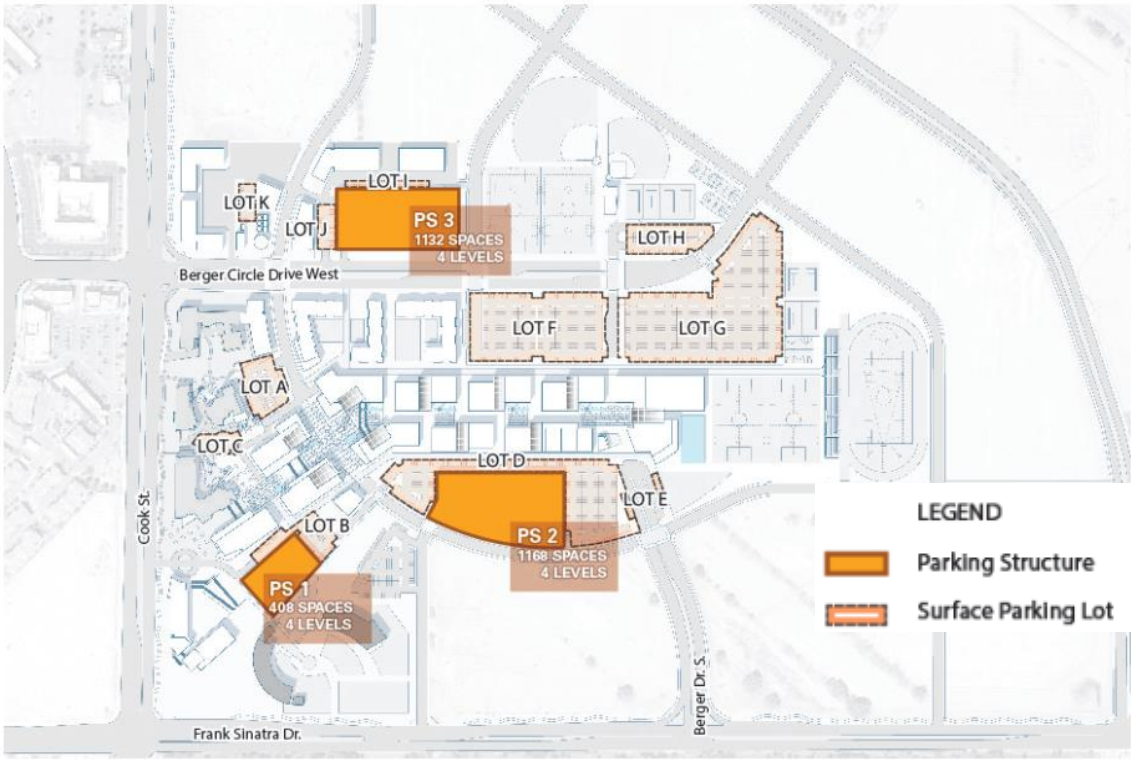
Source: 2016 Master Plan

Figure 6
Pedestrian and Bicycle Network



Source: 2016 Master Plan

Figure 7
Parking



Source: 2016 Master Plan

Landscape and Open Space

The Master Plan provides for a sustainable approach to landscape, open space, and design enhancements that will showcase the campus' natural landscape by using indigenous plants and providing habitat for native species. By cultivating a diverse landscape that is resilient, the campus will serve as a method of preserving the natural environment as well as a valuable learning resource for the University. These include:

- Integrate native, drought-tolerant plants and large-scale electronic, and static signage monuments to the enhance the campus central promenade
- Introduce wayfinding/signage kiosks, bike lockers and racks as well as pedestrian-scale illumination equipment
- Promote permeable hardscape materials for stormwater capture
- Densify campus with palms and tree canopies
- Extend hardscape to the buildings along the central promenade to form a series of interactive plazas and entry plazas
- Incorporate solar panel shading systems, collaboration pavilions, bike lockers, casual seating and tables to create an aesthetically appealing and thermally-comfortable walkway linking the plazas to the central promenade

- Strengthen the residential building area with landscape elements that would unify residential building façades and their activated ground-level.

The PDC campus is located in the Sonoran Desert of California, in extremely dry climate with yearly extremes of very hot summer days reaching temperatures of over 115 degrees Fahrenheit to cool winter nights dipping below freezing. Average annual precipitation rainfall measures only about 5.5 inches. Winds directions are concentrated from the northwest and east-southeast attaining average maximum monthly wind speeds in the late spring and early summer of 32 to 34 miles per hour. These local winds generate 'blowsands' from the local dune formations in this part of the Coachella Valley that cover adjacent roads, parking lots and landscaped areas in the downwind direction. Therefore, a main design goal for performance for the Palm Desert campus is to maximize livability and comfort during hours of peak use. Summer is dominant and the main concern is overheating. The following strategies aim to make outdoor spaces more comfortable during overheated periods.

- Minimize heat gains
- Maximize evening /night cooling rate
- Provide evaporative cooling
- Promote air flow
- Appropriate building massing
- Cool surfaces and landscape

Several strategies are proposed to improve outdoor thermal comfort. These strategies include shade trees, wind breakers, evaporative cooling towers, and green surfaces in walls, floors, and roofs. Shading is implemented in different densities depending on need. The network of strategies will be organized so that they provide cooler areas in multiple locations along outdoor spaces by combining these strategies. The location and the position of the evaporative cooling towers is based on expected requirements and potential effectiveness. Additional cooling strategies could be implemented such as radiant systems cooled with the green roofs that cool benches combined with shade.

Figure 8 illustrates the landscape and open space framework plan for the campus.

Figure 8
Landscape Organization and Open Space Zones

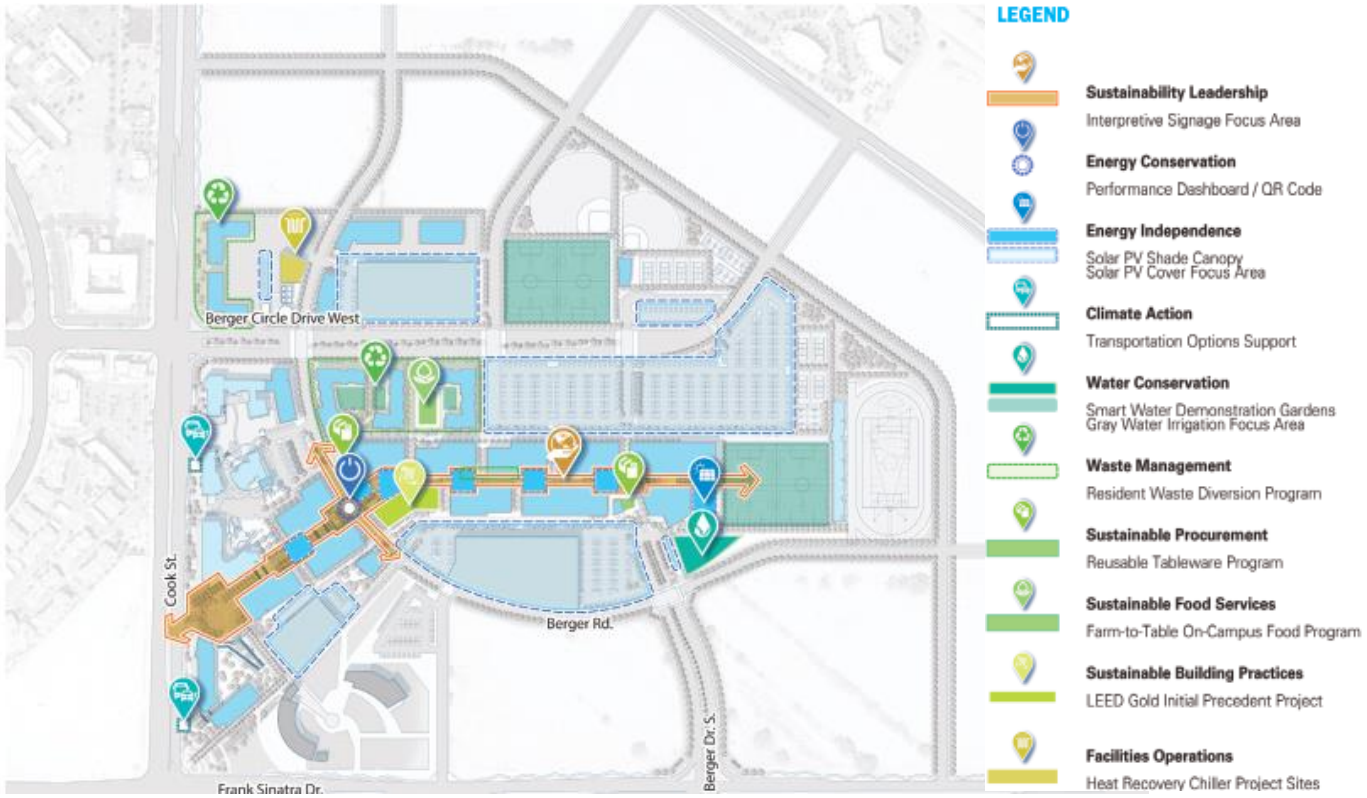
Source: 2016 Master Plan

Sustainability

The Master Plan provides the University an opportunity to lead by example and establish policies and practices for sustainable campus development and operations. Through the Master Plan the University has the ability to establish new goals and benchmarks, sustainability targets, and metrics to extend campus leadership and commitment towards stewardship of its resources such as water conservation, energy independence, and community resiliency. By employing features such as expanded use of photovoltaic systems, high-performance building envelopes, and drought tolerant landscapes, the sustainability initiatives will strategically utilize campus resources, conserve water and energy, and establish the Palm Desert campus as an exemplary institutional leader.

Figure 9 illustrates the sustainability framework plan for the campus.

Figure 9
Sustainability Framework



Source: 2016 Master Plan

Campus Development

To accommodate the projected future campus student enrollment, the Master Plan provides for incremental campus development with approximately 1.21 million gross square feet of new academic, administrative, athletic, and support campus facilities, new on-campus student housing, and improvements. The future development focuses on the facilities needed by the University's academic programs; campus life programs, including student housing, recreation, and facilities maintenance; and campus infrastructure, including parking.

Academic Facilities To accommodate the projected future campus student enrollment, the Master Plan calls for the development of 8 to 10 new academic buildings of approximately 408,000 square feet over the next 20 years. The buildings will be strategically placed within the core area along a new pedestrian promenade to create a more dense walkable campus.

In addition to instructional buildings, the 2016 Master Plan provides for the following core facilities needed to create a fully functioning campus – in particular a campus that fully supports and attracts students. All planned facilities and buildings, including long-term parking structures, are illustrated in Figure 10.

Library/Media Center with approximately 71,000 square feet of space made available to students and faculty. The library will be located near the Coyote Plaza and will provide study areas, computer lounges, information resources, food service, meeting rooms, faculty and student offices, and other instructional space for the University's academic programs.

Student Union and Dining Commons with approximately 75,000 square feet will provide meeting space, food services, student meeting rooms, student lounge and club rooms, a bookstore, and other related student support functions.

Student Education and Wellness Center with approximately 105,000 square feet of physical education space located at the eastern end of the pedestrian promenade, to serve both physical education programs, such as Kinesiology and Gerontology, as well as student recreation needs. The center will include a physical education building with gymnasium, lockers, workout rooms, faculty offices and a Student Recreation/Wellness building with fitness rooms, weight rooms, dance, an outdoor pool and other exercise facilities that support student health and wellness.

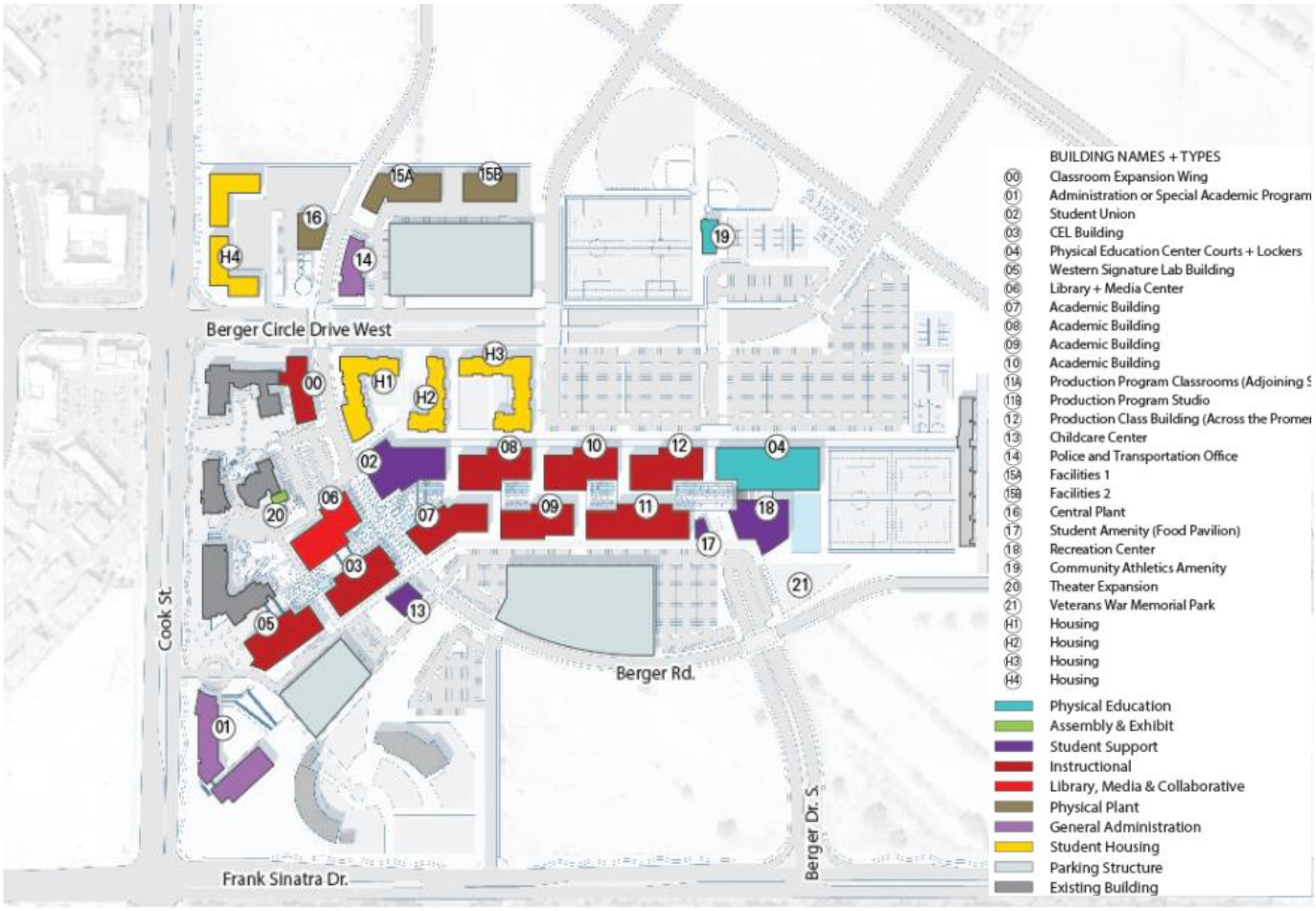
Physical Education with playfields provided in two locations: two soccer fields and a future track/soccer field with bleachers near the Physical Education center; and in an area north of Berger Circle Drive that will include two additional soccer fields, regulation size baseball and softball fields, and tennis courts.

Administrative and Maintenance Facilities Approximately 130,000 square feet of instructional, administrative and maintenance facilities are planned to serve the growing student population and the new facilities, including a new, approximately 26,500 square-foot physical plant on campus.

Student Housing providing approximately 616 beds in new residence halls. In general, a basic residence hall unit will consist of a double bedroom but to provide greater flexibility, each residence hall pod or wing will also include single bedrooms for resident advisors. Each wing will also have its own study room and will share a lounge/ living room space with its associated adjacent wing. The new student housing will be supported with nearby dining halls, student support spaces, and other amenities. Since there is more than adequate land available for major campus facilities, student housing could be increased if demand warranted.

Parking Approximately 4,000 new parking spaces are planned to be located to the north and south of the campus core, generally keeping vehicles to the periphery of the campus while allowing easy access into the pedestrian areas of the campus. The Master Plan provides for parking in surface lots and for parking structures to be constructed on those surface lots in the future (see Figure 7).

Figure 10
Master Plan New Facilities



Source: 2016 Master Plan

Implementation Framework

The campus development pursuant to the Master Plan will proceed incrementally over the next 20 years. The 20-year flexible framework offers a logical order for development that addresses campus needs over time. The initial facilities envisioned to be developed earliest within the Master Plan timeframe include:

Library and Media Center: The approximately 71,000 square-foot library and media center will be one of the initial new buildings constructed. It will include study areas, computer lounges, and information resources, educational spaces, food service, meeting rooms, faculty and student offices and other functions that will improve the quality of life on the campus.

***Theater Building Expansion*:** The existing theater building will be expanded to provide approximately 1,300 square feet of additional space.

Classroom Expansion Wing: A new, approximately 37,000 square-foot wing will be added at the academic building adjacent to the Library and Media Center providing classroom space to support the emerging Hospitality Program.

Childcare Center/Facility: A new, approximately 10,500 square-foot daycare/childcare facility will include classrooms, and is proposed as a collaborative facility and a resource that could be shared with the community.

Police and Transportation Office: Currently the Palm Desert campus does not have a dedicated police presence. The Master Plan provides for a new, approximately 20,000 square-foot police and transportation office providing a dedicated area for the police and transportation operations and security systems.

Facilities 1 Maintenance Building: The PDC existing maintenance program will be updated with an approximately 18,000 square-foot new facilities maintenance building located in the North Campus/Facilities Maintenance Zone.

Student Housing: The first phase of student housing with 300 – 400 beds is planned to provide a 24/7 setting that encourages students to spend more time on campus and creates a collaborative, learning, and living environment.

Project Actions

The following actions are anticipated to be required for the project:

- CSU Board of Trustees
  Approval and adoption of the 2016 Master Plan
  Approval of public-public and public-private partnerships
  Approval of conceptual and schematic plans for future facilities and improvements

- City of Palm Desert
  Approval of any improvements within the City rights-of-way

- Coachella Valley Water District
  Approval of new connections and/or increase in quantity of water delivery to campus
  Approval of new connections and/or increase in quantity of wastewater, as needed
  Approval of new connections and/or increase in quantity of stormwater, as needed

- Regional Water Quality Control Board
  Compliance with MS4 stormwater permit
  Issuance of Construction Storm Water General Permit for construction of new facilities

- State Fire Marshall
  Fire safety review and approval of future facilities and improvements

- Division of State Architect
  Approval of accessibility for future facilities

- Others, as may be necessary

3.0 Environmental Impact Analysis

This section of the EIR examines potentially significant effects associated with the CSU San Bernardino, Palm Desert Campus 2016 Campus Master Plan as identified through the NOP process (see Section 1.0 and Appendix A) and identifies mitigation measures to avoid or substantially reduce impacts found to be potentially significant in the EIR analysis. Each environmental issue for which the Initial Study (see Appendix A) identified a potentially significant impact is discussed in the following manner:

Environmental Setting describes the existing environmental conditions in the vicinity of the project as it exists before the commencement of the project to provide a baseline for comparing "before the project" and "after the project" environmental conditions.

Impact Criteria defines and lists specific criteria used to determine whether an impact is considered to be potentially significant. Appendix G of the CEQA Guidelines; applicable local, State, federal or other standards; and officially established thresholds of significance are the major sources used in crafting criteria appropriate to the specifics of a project, since "….an ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting" (CEQA Guidelines Section 15064[b]). Principally, "… a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance" constitutes a significant impact (CEQA Guidelines Section 15382).

Environmental Impact presents evidence, based to the extent possible on scientific and factual data, about the cause and effect relationship between the project and potential changes in the environment. The exact magnitude, duration, extent, frequency, range or other parameters of a potential impact are ascertained to the extent possible to provide facts in support of finding the impact to be or not to be significant. In determining whether impacts may be significant, all the potential effects, including direct effects, reasonably foreseeable indirect effects, and considerable contributions to cumulative effects, are considered. If, after thorough investigation, a particular impact is too speculative for evaluation, that conclusion is noted (CEQA Guidelines Section 15145).

Mitigation Measures identify measures that can reduce or avoid the potentially significant impact identified in the EIR analysis. Standard existing regulations, requirements, and procedures applicable to the project are considered a part of the existing regulatory environment. Mitigation measures are those feasible, project-specific measures that may be needed in addition to compliance with existing regulations and requirements, in order to reduce significant impacts. Mitigation, in addition to measures that the lead agency will implement, can also include

measures that are within the responsibility and jurisdiction of another public agency (CEQA Guidelines Section 15091[a][2]).

Level of Impact After Mitigation indicates what effect remains after application of mitigation measures, and whether the remaining effect is considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as "unavoidable significant impacts." To approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the EIR, has balanced the benefits of the project against its significant effects, and has concluded that the benefits of the project outweigh the unavoidable adverse environmental effects, and thus, the adverse environmental effects may be considered "acceptable" (CEQA Guidelines Section 15093 [a]).

3.1 Aesthetics

Environmental Setting

The most notable element of the CSU San Bernardino, Palm Desert campus' visual character is its desert setting with views across the Coachella Valley to the Indio Hills. The campus uniquely integrates the local desert setting, as illustrated in Figures 11.

Figure 11
Views of the Campus

Source: csusb.edu

The campus lies within a rapidly developing area of the City of Palm Desert. Since the current campus location was established in 2002, four buildings have been developed along the southwestern edge of the campus along Cook Street and Berger Circle Drive. All of the existing buildings are in good condition, and as a group reflect a consistent architectural style that lends a

visual cohesiveness to the campus. The buildings have established an excellent standard of design quality and set a visual architectural and landscape architectural theme that draws from the surrounding desert environment, as depicted in Figure 12. Classroom and lab buildings maintain a pattern of three floors in height, contributing to a compact campus.

Other important place-defining features include campus visibility from Interstate 10 freeway (I-10), visibility of the campus within the community, and the long-range views of the Indio Hills.

Figure 12
Indian Wells Center for Education Excellence Building

Source: 2016 Campus Master Plan

Impact Criteria

Impact is considered to be significant if the implementation of the 2016 Master Plan will substantially degrade the existing visual character or quality of the University campus or its surroundings, have a substantial adverse effect on a scenic vista, and/or create substantial light and glare that will adversely affect day or nighttime views in the area.

Environmental Impact

Integral components s of the Master Plan are the Design Guidelines and Landscape Design Guidelines. The guidelines address the focus on:

***Connections Between Buildings and Campus Site*:** The Palm Desert campus is planned to grow from its four initial buildings into a future campus that is denser, more compact - highlighting its campus identity while merging with its natural environment and off-campus development. The Master Plan emphasizes to connection between the existing campus and new campus development by building upon the existing campus and incorporating portions of the circular roadway system to facilitate a transition to new campus development. Providing a seamless transition from the old campus core with new development will create a compact campus core facilitating student access between facilities and parking.

Campus Landscape as a Unifying Element: Landscaping on the campus incorporates a number of attributes that correspond with its desert setting and climate. In response to its climate environment, the Master Plan focuses on concentrated open space with abundant covered shading, shelter from seasonal desert wind, and a dense pedestrian-oriented grouping of buildings and outdoor space that reduce walking distances and address conservation of natural resources and energy. The identified landscape principles contribute to the overall organization of open space on campus. Integrated with architectural guidelines and the coordinated performance-driven site initiatives, campus landscape serves as the unifying element.

Design

The Master Plan's Design Guidelines aim to strengthen the campus "context", including its architectural character and landscape setting to reinforce the educational mission, and to strengthen the campus' sense of place. To do so, the Guidelines provide design direction for the campus and future architects to ensure that new building development consistently connects with existing buildings, circulation networks, and the natural landscape. The Guidelines comprehensively address aspects of building and site design, building massing and scale, and design of parking areas to landscape details and signage. The Design Guidelines are based upon the following major goals:

- ***Achieve visual integration*** – each individual building should first establish its identity within the greater whole of the campus and then present its individual identity. Ensure all new buildings act as supportive components for enriching and activating the public space network.

- ***Foster a strong sense of community*** – provide multi-functional outdoor rooms for accommodating events, programs, social interactions, and interdisciplinary collaboration. The building design should aim to strengthen an urban lifestyle community through providing ample active uses on the ground floor.
- ***Foster a sense of permanence*** – promote high quality design in buildings, landscape, signage and wayfinding as well as campus art installations. Employ enduring designs and materials for campus buildings that evoke a sense of permanence. Encourage innovative and sustainable design and construction in all phases of campus development.
- ***Strengthen connections between building and site*** – establish a distinguished hierarchy of pedestrian promenade, pathways, and plazas that can connect and serve campus destinations. Create a pedestrian/bicycle-friendly environment by implementing tree canopies, street amenities, shading structures, and traffic calming measures. Articulate building entries and entry plazas to directly orient campus users into the buildings.
- ***Establish a cohesive visual design vocabulary*** – collection of the buildings, considering all variations of style, size, function, and age, should share a common visual vocabulary. New building development should appear relative to existing building and natural environment. The remodel of existing buildings should respect the building's authentic character.
- ***Utilize landscape to unify campus environment*** – use landscape to unify the overall character of campus buildings and to enrich the public spaces. Incorporate a palette of drought tolerant plants that contributes to a cohesive and uniform aesthetic in the campus' desert climate setting.
- ***Build a safe and secure environment*** – integrate active uses on the ground floor of the academic and residential buildings. Encourage large proportion of transparent features on the ground-level of buildings and avoid blank walls where possible. Ensure appropriate illumination for pedestrian pathways, public spaces, building entries, and parking areas.
- ***Respect natural setting*** –utilize drought-tolerant plants in the landscape design to reduce water consumption and cost of maintenance. Integrate low-impact design measures on campus for stormwater capture and infiltration.

Example of Visual Integration

Example of Strong Sense of Community

Example of Fostering New Sense of Permanence

Example of Connections Between Building & Site

Example of Common Visual Design Vocabulary

Example of Landscape as Unifying Element

Example of Safe and Secure Environment

Example of Natural Setting

The Design Guidelines portray ways that new buildings, existing buildings, and the landscape environment can work together to form a more cohesive and aesthetically pleasing appearance. The development patterns in the Master Plan emphasize strategic and efficient utilization of land uses by focusing new academic buildings along Palm Canyon Walk, the planned central east-west pedestrian promenade. This will help to create a collegial campus environment and uniquely address the needs of the local community while allowing the new campus to evolve from a sub-urban setting to a more compact campus that is easily walkable.

The guidelines that apply to architecture, landscape, and signage serve to guide the development of the campus, work toward an increasing visual and aesthetic integration to unify the visual environment by establishing measurable ways to provide design direction for future architects, landscape architects and/or designers. Specific design guidelines for the planned new buildings and facilities encourage ground level function, visual porosities and activated edges that aim to create a connective urban space. Other architectural design guidelines help govern details such as height limits, setbacks, building areas for new buildings, and plans for other visual aspects of the campus like landscape and open space features.

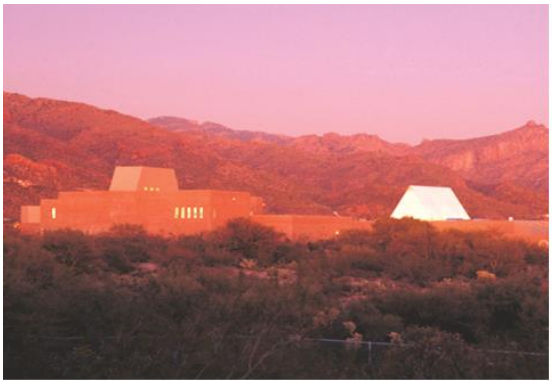
The proper articulation of a building's façade will add richness and variety to the academic architecture. Quality design of buildings' façades and building colors can define its architectural character and add interest to campus streets, quads, and other open spaces. Thus, for new buildings, the guidelines recommend a rich, saturated, and thematic color palette of earth tones with burnt orange, red, and yellow orange that contrasts with the surrounding desert's muted earth tones. With these features the guidelines will help connect existing buildings and open space with the campus context and ensure consistency in the design of future buildings, including the architectural character and landscape setting.

The Design Guidelines also aim to address the visibly site-related opportunities. The Master Plan sites several components to campus visibility: visibility of the campus when seen from a distance

such as its visibility from the I-10 Freeway; visibility of the campus as viewed from surrounding streets; and visibility of the campus as a local institution and the CSU San Bernardino, Palm Desert Campus through local identification signs. One important feature is the prominence of the campus located at the top of a gradual rise that starts near the I-10 Freeway. This offers an opportunity to capitalize on the location by created a silhouette of buildings along this natural plateau highlighting the campus presence as viewed from the I-10 Freeway and surrounding streets - thereby creating a strong identity for CSU San Bernardino, Palm Desert Campus within the Coachella Valley.

The following figures provide a visual example of the existing campus street view and conceptual references of the view from the I-10 Freeway.

Existing Campus Street Views



Example of Concept Views

The Master Plan's Open Space Framework brings additional distinction, functionality, order and legibility to both the existing campus and its future physical growth by establishing and defining clearly composed, expressed and articulated landscape zones. Contributing to and collectively defining the character and visual quality of the institution, these zones include primary and secondary gateways, streetscapes, plazas, pedestrian promenades, quads and corridors and athletic facilities. Articulating the character defining features and the visual quality of these zones, the Plan not only outlines a general framework or open space structure but also provides broad guidance for the design of these major open spaces.

Landscape

The quality of the campus landscape is a recognizable part of campus "brand." The components of the landscape – the desert setting, pedestrian pathways, campus gateways, and physical connections – are critical features of the campus aesthetics and work to reinforce the integrative role of open space: creating connections between landscape and structures, and a comfortable, human-scaled setting for educational activities. The Master Plan includes comprehensive Landscape Design Guidelines to create this landscape "brand" for the campus to achieve the following goals:

Regional Character: Contribute to the authentic character of the regional semi-arid/desert environment through use of regional adaptive plant species and locally/regional sourced materials.

Multi-Functional: Integrate a range of open spaces with distinctive character and varied scale that can accommodate diverse programs, events, and activities for enriching the campus public realm and add more interest to the community.

Habitat Enrichment: Introduce native plant species and natural systems to create a resilient community which can protect and increase biodiversity, reduce maintenance, minimize water and energy consumption and create a positive environmental impact.

Landscape Identity: Apply different landscape design approaches, plants, detail components, materials to establish a distinguished identity for each landscaped zone but still achieve a coherent landscape image that matches with the overall campus building character.

Communal Space: Provide ample outdoor rooms for students, faculty, visitors as communal spaces encompassing both informal/formal, public/semi-public open spaces for facilitating social gatherings and interactions.

Low Impact Development (LID): LID designs should be considered early on in the site design and development process. Where possible, integrate LID treatments such as renters, permeable pavers, bioswales, and rain gardens for stormwater capture and micro climate mitigation.

The Master Plan aims to build upon the existing landscapes and campus character and create a comprehensively unique and collegial sense of place. The open space framework brings additional distinction to both the existing campus and its future physical growth by establishing and defining clearly composed, expressed, and articulated landscape zones. The specific landscape zones help to organize the structure of planned new buildings, facilities and parking lots. Each landscape zone includes character defining qualities with the overall goal to create a holistic and consistent open space that unifies, connects, and brands the student, faculty, staff and visitor experience to create an attractive and unique sense of place. The landscape zones are described below and illustrated in Figure 13.

Gateway Corridors: The primary West Gateway Corridor, Berger Circle Drive West and the secondary South Gateway Corridor, Berger Drive South provide the principal vehicular and

pedestrian connections from the surrounding region and community to the campus core. Their consistent landscape treatment will clearly define the nature and the quality of the overall Campus impression. Respectively, landmark intersections at Cook Street and Frank Sinatra Drive are anticipated to include appropriately scaled and themed brand monuments, coordinated wayfinding elements, gateway landscape as well as distinct landscape planting. Common streetscape components will include invitingly scaled and configured pedestrian walkways, consistently spaced canopy shade trees together with coordinated lighting fixtures and wayfinding elements. The landscape quality and the unified treatment of these connecting corridors will not only serve vehicular and pedestrian functions but will inherently communicate and express the natural quality and the environmentally sensitive character of the campus as a whole.

Corner Plaza and Existing Campus: Extending the western edge of the campus from Frank Sinatra Drive northerly to Berger Circle Drive West, the character of the landscape in these zones intends to create a strong differentiated and unified public or civic scale. Coordinated together with the existing landscape infrastructure surrounding the Palm Desert Health Sciences Building, the Indian Wells Center of Educational Excellence and the Mary Stuart Rogers Building, this landscape zone will be extended southerly to encompass the areas around the planned Administration Building as well as to create and address the Cook/Sinatra intersection. The corner landscape treatment will be seamlessly blended together and coordinated with the UCR campus landscape and composed to embrace and present a clear, civically scaled and impactful signature statement. The planned landscape integrates topographic changes in a re-naturalized setting. As the community's pedestrian gateway into the campus, signage monuments together with bold/simple plantings of water-wise arid specimens of trees /shrubs and ground covers demonstrate the University's overreaching commitment to sustainability and an environmentally sensitive campus.

Palm Canyon Walk: Situated between the proposed Administration Building and the existing Palm Desert Health Sciences Building a vehicle and pedestrian entry establishes a prominent gateway and a visual/physical link to the Campus Core and Palm Canyon Walk. The planning and design emphasis on this Gateway is to extend the Academic Core/Palm Canyon landscape structure to the Cook Street public realm edge, thus creating both a physical promenade and a symbolic visual corridor and connection to the "heart of the campus". A generously scaled vehicle drop off/pick up location is incorporated within the access circulation and inviting pedestrian amenities, including shade covered walkways/sitting areas together with clusters of Native California Palms.

Academic Core/Palm Canyon Walk: This planned linear corridor, a centralized open space/pedestrian promenade connects and links the Cook Street entry to the eastern edge of the campus and its athletic facilities. This corridor, envisioned with minimum pedestrian/vehicle conflicts concentrates pedestrian activity in shaded courtyards to foster dynamic interconnectivity, collegiality and social interaction. Along this corridor, wind protection and solar controlling shade elements including architectural trellises and generous tree/palm canopies are strategically placed to work together and integrate performance driven climate-modifying devices such as purposeful wind-shadow building massing, cooling green walls, evaporative cooling and water feature devices. Conceived as the primary centralized campus circulation

space the academic core will be an inviting and attractive space for students, faculty, staff and visitors. An inclusive, beguiling oasis inspired by the iconic Palm Canyons found throughout the Coachella Valley.

Palo Verde Corridors: These two pedestrian corridors run parallel to Palm Canyon Walk on the north and south side of the academic core buildings and are envisioned as landscape transition zones from surface parking areas into the academic core. The landscape character would highlight native desert plant materials, the Palo Verde tree in particular, to establish a unified campus landscape that expresses the natural qualities and environmentally sensitive character of the campus as a whole. These two corridors will also allow service and fire access, as necessary, for all buildings in the academic core.

Campus Residential: Situated north of the Academic Core, the Residential Quads serve the needs of the on–site student population. Resident amenities are envisioned to be on par with private or commercial off-campus living accommodations. These domestic, comfortable, inviting and secure neighborhood enclaves include flexible shaded outdoor spaces facilitating formal and informal gatherings, sitting, dining and collaboration courts together with an array of recreational features such as volleyball areas, basketball courts, gardens and Frisbee lawns. In fact, these enclaves will be the only areas to utilize limited turf grass in centralized courtyards and quads. Secure and visually screened storage areas should be provided for bicycles, skateboards and scooters. Required vehicle ingress/egress for emergency, maintenance, move in/move out traffic will be integrated into this well-ordered and efficiently programmed neighborhood.

North East and South Parking and Facilities: A significant aspect of the campus plan is the allocation of approximately 9 acres for surface parking facilities. These parking zones have been strategically configured and located to facilitate ease of pedestrian access to the campus core. To mitigate the seasonal climate extremes, shading devices are anticipated to be employed throughout these parking areas. A combination of canopy tree planting and solar shade structures are envisioned. In the former situation parking lots will be designed to include horticulturally adequate tree planters, spaced at frequent intervals for continuous shade cover and configured to allow for stormwater collection/treatment swales. Promoting a safe and secure night environment, area lighting will be incorporated into proposed shade structures or carefully coordinated with tree planter locations.

Athletic Facilities: The Master Plan allocates approximately 16 acres of open space areas programmed for physical education, competitive sport and general recreation and exercise. To serve both the student body and the greater community, the northern complex is envisioned as a community serving “Sports Park” and the eastern complex is planned as the primary University athletic fields. The Master Plan incorporates landscape system components that include a network of shaded pedestrian and service vehicle pathways that interconnect these facilities within the campus context and establish a cohesive spatial organization. Linear tree windrows are located where possible to buffer and screen prevailing seasonal winds, and spaces are enhanced with informal shade tree groves and sitting/gathering areas. As topography allows, these athletic fields will be configured to provide stormwater retention and groundwater recharge.

Figure 13
Campus Landscape Organization/Open Space Zones

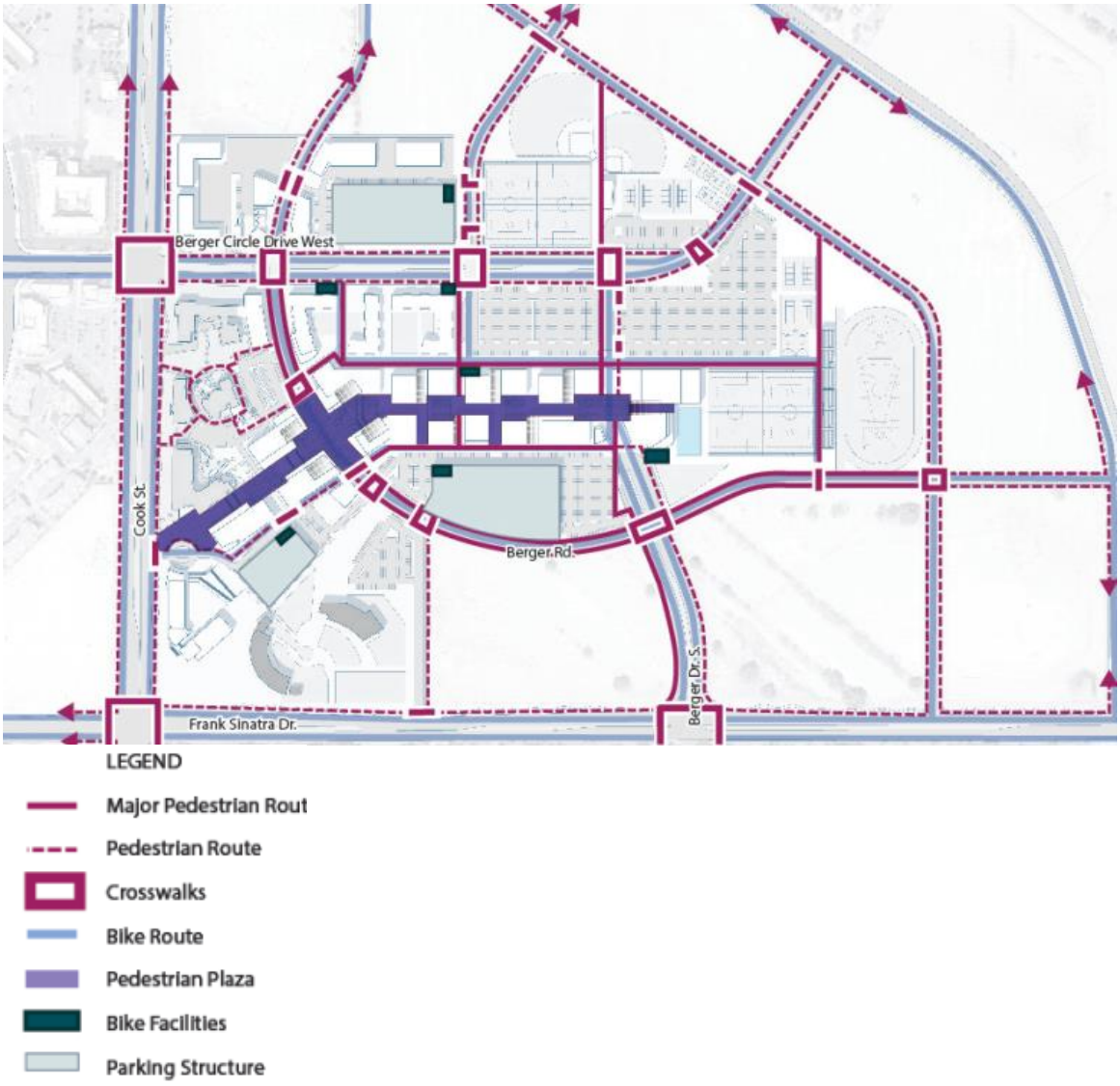
Planned landscape enhancements along Palm Canyon Walk will serve as a shared connective urban space. Focusing denser infill facilities and better interior utilization along this walkway will also help create the central corridor lined with shared use facilities, bustling with collaborative interactions and social activity. Together with appropriately scaled palm and tree canopies, other landscape amenities and furnishings, soaring architectural photovoltaic canopies will create inviting and generous areas of shade.

Palm Canyon Walk, acknowledged as the campus spine, will facilitate campus navigation and expand the academic core. The central walk is planned to be framed by new academic buildings to create a shaded canyon-like environment within the surrounding desert environment. With

thoughtful design of the central walk space and the use of sustainable techniques wind can be mitigated and temperatures reduced to make these spaces not only comfortable, but beautiful.

Figure 14 illustrates the planned Palm Canyon Walk and other pedestrian facilities.

Figure 14
Pedestrian / Palm Canyon Walk



Light and Glare

The Master Plan provides for future campus development through compact development contained within approximately 85 acres of the 169-acre campus, which avoids introducing new lighting into the rest of the campus' land. Currently, security lighting is provided on campus in walkways, parking lots, around buildings, and at other key locations. Energy efficient bulbs and other measures are used to the extent feasible to reduce energy use, glare, and illumination of the night sky. Existing campus security lighting will continue to be upgraded and expanded throughout the life of the Master Plan, and new lighting will be installed at new facilities, plazas, pedestrian walkways and other locations as necessary to ensure adequate safety. All lighting will be focused, and low-glare, cut-off, and shielded lights will be used as appropriate to continue to maximize safety, minimize spillover lighting, and enhance campus' aesthetic character.

The Master Plan's Building Design and Sustainability Guidelines and Interior Environment Guidelines also provide plans to reduce energy through the application of efficient lighting systems and daylighting controls. The Master Plan provides for pedestrian-scaled lighting equipment, a combination of canopy tree planting and solar shade structures in parking lots, and passive strategies that will harness natural day light within buildings, enhancing lighting efficiency and reducing energy use.

The Master Plan provides for a campus athletics complex located within the Physical Education (PE) and Athletics Zones in the eastern area of the campus. The 16-acre open space and athletic complex will serve both the physical educational programs and student recreational needs. The plan includes a PE building with a gymnasium and outdoor pool. Two new soccer fields and a track and soccer field with bleachers will be located near the PE center. Two additional soccer fields, regulation size baseball and softball fields and tennis courts are located north of Berger Circle Drive. In accordance with the established University procedures, the design process for lights at these sport facilities will include a field-specific lighting analysis and design focusing on avoiding line-of-sight effects to the closest residential neighborhoods south and southeast of campus. campus. These neighborhoods are separated from the campus and the planned athletic fields by the campus' undeveloped land, which forms a buffer between the campus and the off-campus development, and by a major arterial street, Frank Sinatra Drive (see Figure 3).

The future design of each sport field's lighting system will incorporate the most technological advances relative to glare shield protection and reduced light spillage technology, including controlling spill and glare light by advanced fixture design; minimum lamp and pole fixtures; shielding; proper mounting heights to ensure maximum steepness in downward fixture aiming that focuses the light directly into the field; specific lamp type and position configuration; and use of best available fixtures to provide necessary illumination and at the same time minimize visibility from nearby areas.

Therefore, the campus lighting impact will not be significant. Overall, the campus' lighting will help to create a vibrant campus environment that fosters a strong sense of community and corresponds to the character of the a rapidly developing City of Palm Desert.

Mitigation Measures

The Master Plan will result in enhancing the visual and aesthetic campus character and quality. With the Master Plan's Design Guidelines and Landscape Design Guidelines, the new facilities, landscaping, open space, signage, and other elements will create a visual appearance of the campus that is both distinct and cohesive. With incorporation of these Master Plan's features and components, impact will be beneficial; no mitigation is required.

Level of Impact After Mitigation

The Master Plan will result in a beneficial impact of enhancing the visual and aesthetic character and quality of the campus; no mitigation is required.

3.2 Biological Resources

A biological resources study was conducted for the Master Plan project in February 2017 by SWCA Environmental Consultants. The study included a review of the existing literature and data as well as a field survey. The review provided a potential list of special-status resources to be surveyed at and near the project area during a field evaluation. The following resources were used to generate a list of potential species:

- The California Natural Diversity Database (CNDDB) *Rarefind 5* data within 5 miles of the Project;
- California Native Plant Society's online Inventory of Rare and Endangered Plants containing species-specific habitat requirements for plant species;
- *The CalFlora Database* website;
- United State Fish and Wildlife Service (USFWS) database of designated Critical Habitat; and
- Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Parcel Report

The study findings are summarized below, and the entire study is included in Appendix B of this EIR.

Environmental Setting

The Palm Desert campus is located next to the City of Palm Desert in the California's Sonoran Desert. Over the millennia, the campus area has been covered multiple times by Lake Cahuilla, a fresh water lake that was created by the Colorado River. As a product of Lake Cahuilla lakebed sedimentation, the Palm Desert campus and surrounding areas are covered with soils comprised of various fine to medium-grained silt and sand materials. Given the soil and desert climate the natural vegetation within the Master Plan's planning area is sparse.

The general local plant association is classified as Sonoran Creosote Bush scrub represented by creosote bush, burro bush, brittlebush and desert Brickellia.[3] Although altered by previous agriculture lands, vineyard plantings, and wind rows, the Palm Desert campus was part of the Coachella Valley Sand Dune community/"blowsand" habitat, which has high levels of endemic species including the Coachella Valley fringed-toed lizard.[4] This lizard is listed as a threatened species under the Endangered Species Act, and has received special protection in the 3,709-acre Coachella Valley National Wildlife Refuge located 3 miles northeast from the campus.

The project site consists primarily of former agricultural lands in the east, southeast, and northeast, developed areas in the southwest associated with the existing campus facilities, highly

[3] City of Palm Desert, Biological Resources Element 2004
[4] http://www.fws.gov/saltonsea/Coachella/CV_History.html

disturbed Creosote Bush Scrub in the northwest, and moderately disturbed Creosote Bush Scrub between portions of the campus just south of the Master Plan approximately 85-acre planning area. The former agricultural lands and highly disturbed Creosote Bush Scrub had previously been sprayed with soil bonding stabilizers using a wheeled vehicle which left tracks throughout these areas creating further substantial disturbances to the land. Figure 15 illustrates the existing conditions.

Figure 15
Highly Disturbed Project Area

Source: Biological Resources Analysis, 2017
*Note the blue color of the soil bonding agent and the tire tracks from the vehicles that applied it.

Impact Criteria

Impact on biological resources is considered to be significant if the project will:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

- Have a substantial adverse effect on any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any resident or migratory species of wildlife or with established native resident or migratory wildlife corridors
- Conflict with the provisions of an adopted federal Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan

Environmental Impact

The Master Plan provides for a full service University campus to support growing student enrollment. The long-term campus development will efficiently utilize land to the east of the existing campus buildings and preserve a balance between built-up areas and open space.

The project area is not located within any USFWS-designated critical habitat or any habitat conservation plan. There are no wetlands, riparian habitats, or established native resident or migratory wildlife corridors within the project area.

Due to the developed and highly disturbed nature of the project area, and its location within a greater urbanized area, none of special-status plant or animal species, including the Coachella Valley fringed-toed lizard, were found or are expected to be found within the project area due to the lack of suitable habitat, as summarized in Table 1. Therefore, no significant impact on biological resources will result from campus development pursuant to the Master Plan.

Table 1. Special-status species with recorded occurrences within 5 miles of the Project

Common Name	Scientific Name	Listing Status[1]	Potential to Occur
PLANTS			
triple-ribbed milk-vetch	Astragalus tricarinatus	FE, CRPR 1B.2	Absent
Coachella Valley milk-vetch	Astragalus lentiginosus var. coachellae	FE, CRPR 1B.2	Absent
chaparral sand-verbena	Abronia villosa var. aurita	CRPR 1B.1	Unlikely
California ditaxis	Ditaxis serrata var. californica	CRPR 3.2	Absent
glandular ditaxis	Ditaxis claryana	CRPR 2B.2	Absent
Abrams' spurge	Euphorbia abramsiana	CRPR 2B.2	Absent

Common Name	Scientific Name	Listing Status[1]	Potential to Occur
flat-seeded spurge	Euphorbia platysperma	CRPR 1B.2	Absent
slender cottonheads	Nemacaulis denudata var. gracilis	CRPR 2B.2	Absent
WILDLIFE			
Invertebrates			
Casey's June beetle	Dinacoma caseyi	FE	Absent
cheeseweed owlfly (cheeseweed moth lacewing)	Oliarces clara	SA	Absent
Coachella giant sand treader cricket	Macrobaenetes valgum	SA	Absent
Coachella Valley Jerusalem cricket	Stenopelmatus cahuilaensis	SA	Absent
Fishes			
desert pupfish	*Cyprinodon macularius*	FE, SE	Absent
Reptiles			
flat-tailed horned lizard	*Phrynosoma mcallii*	SSC	Absent
Coachella Valley fringe-toed lizard	*Uma inornata*	FT, FE	Absent
Birds			
prairie falcon	*Falco mexicanus*	WL	Absent
burrowing owl	*Athene cunicularia*	SSC	Unlikely
southwestern willow flycatcher	*Empidonax traillii extimus*	FE, SE	Absent
vermilion flycatcher	*Pyrocephalus rubinus*	SSC	Absent
black-tailed gnatcatcher	*Polioptila melanura*	WL	Absent
Crissal thrasher	*Toxostoma crissale*	SSC	Absent
loggerhead shrike	*Lanius ludovicianus*	SSC	Absent
Mammals			
Western yellow bat	*Lasiurus xanthinus*	SSC	Absent
Palm Springs round-tailed ground squirrel	*Xerospermophilus tereticaudus chlorus*	SSC	Absent
Palm Springs pocket mouse	*Perognathus longimembris bangsi*	SSC	Absent
earthquake Merriam's kangaroo rat	*Dipodomys merriami collinus*	SA	Absent

Common Name	Scientific Name	Listing Status[1]	Potential to Occur
pallid San Diego pocket mouse	*Chaetodipus fallax pallidus*	SSC	Absent
San Diego desert woodrat	*Neotoma lepida intermedia*	SSC	Absent

1. Status Key

Federal/State Status:

FE Federally Endangered
FT Federally Threatened
SE State Endangered
SSC Species of Special Concern-CDFW
WL Watch List-CDFW
SA Special Animal tracked in the CNDDB

California Rare Plant Rank (CRPR):

1B Rare or Endangered in California and elsewhere
2B Plants Rare, Threatened, or Endangered in CA, But More Common Elsewhere
3 Plants About Which More Information is Needed - A Review List
0.1 Seriously threatened in California
0.2 Moderately threatened in California

Mitigation Measures

Impact will be less than significant and no mitigation beyond continued compliance with all applicable existing regulations, requirements, and procedures is required.

Level of Impact After Mitigation

Impact will be less than significant and no mitigation beyond continued compliance with all applicable existing regulations, requirements, and procedures is required.

3.3 Cultural Resources

Cultural Resource studies were prepared by SWCA Environmental Consultants in April and July 2017. Findings of these studies are summarized herein and the reports are included in Appendix C of this EIR.

Environmental Setting

The Cal State San Bernardino, Palm Desert campus is currently comprised of the Health and Science building, the Indian Wells Center for Educational Excellence, the Mary Stuart Rogers Gateway Building, the Indian Wells Theater, and a utility substation. These facilities are concentrated in the campus area, south of the Cook Street and Gerald Ford Drive intersection. The campus is bound on the north and east by Gerald Ford Drive, Cook Street on the west, and Frank Sinatra Drive on the south.

Impact Criteria

The impact is considered to be significant if the project will cause a substantial adverse change in the significance of a historic resource; archaeological resource; or a tribal cultural resource defined in the Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources; or if the project will destroy a unique paleontological resource.

Environmental Impact

The Master Plan provides for strategic campus development concentrated within a compact 85-acre area at the southwestern corner of the campus. A records search was conducted in February 2017 of the California Historical Resources Information System (CHRIS) at the Eastern Information Center (EIC) located on the campus of University of California, Riverside. The search included any previously recorded cultural resources and investigations within a 0.5-mile radius of the Master Plan planning area, herein referred to as the project area. The search also involved a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, City of Los Angeles Historic-Cultural Monuments (HCM) list, and the California State Historic Resources Inventory.

Historic Resources

The Palm Desert campus consists of four existing facilities and a utility substation within a 55-acre area of the campus. All existing buildings were constructed between 2002 and 2008, as follows:

Mary Stuart Rogers Gateway	2002
Indian Wells Center for Educational Excellence	2002
Indian Wells Theater	2005
Utility Sub-Station	2005
Health Sciences	2008

Source: 2016 Master Plan

Typically, buildings that are 50 years of age or more are considered for evaluation of their potential historic value, i.e. the attributes that would qualify the building for listing on the California Register of Historical Resources (CRHR). This includes consideration of whether the building is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; it is associated with the lives of persons important in our past; it embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and/or it has yielded, or may be likely to yield, information important in history or prehistory. The existing campus buildings are 9 to 15 years of age, will continue to be less than 50 years of age by the year 2035 Master Plan's planning horizon, and none of the buildings has been identified as a historic resource.

The existing buildings will not be affected by future campus development, except for a small, approximately 1,300 square feet expansion of the existing theater building. Since none of the buildings is an identified historic resource, the campus development pursuant to the Master Plan will not result in an impact to historic resources.

Archaeological Resources

The California Historical Resources Information Systems (CHRIS) records search identified 7 previously recorded cultural resources within a 0.5-mile radius of the project area. Two of these recorded resources consisted of refuse scatter, another involved the rail lines east of the project area, and other previously recorded resources consisted of two sherds of Tizon brown ware - a form of ceramics, and various elements of glass and dry camp structures. None of these resources are located within the project area.

The CHRIS records search also identified two cultural resource studies conducted within the project area. Both studies were archaeological survey results reports: one was conducted in 1994 for the Cook Street improvement project, and the other was conducted in 1997 for the CSU San Bernardino Coachella Valley Campus original campus' Master Plan. Resources identified in these archeological surveys area appear to be ineligible for the CRHR and they do not represent unique archaeological resources.

In addition to record searches, an intensive-level pedestrian survey of the Master Plan planning area was conducted between February 7 and 9, 2017. The survey included examination of the ground surface for the presence of prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools), historical artifacts (e.g., metal, glass, ceramics), sediment discoloration that might indicate the presence of a cultural midden, and depressions and other features that might indicate the former presence of structures or buildings. The survey identified two archaeological sites, five isolate resources, and one built resource. The archaeological sites consisted of historic refuse dumps containing exclusively residential refuse; the isolate resources consisted exclusively of historic metal cans; and the built resource consisted of a derelict irrigation pipe system. All these sites do not meet the minimum criteria to be considered eligible for the CRHR, and they do not represent unique archaeological resources.

As none of the resources identified within the project area are eligible for the CRHR, the campus development pursuant to the Master Plan will not impact known archaeological resource.

However, mitigation measures are identified to minimize any potential impact associated with previously unknown archaeological resources.

Inadvertent Discovery of Human Remains. If human remains are inadvertently discovered during construction of campus facilities and improvements, State of California Health and Safety Code Section 7050.5 stipulates that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The Riverside County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendent (MLD). The MLD will complete the inspection of the site within 48 hours of being given access to the site and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with these existing regulations will ensure that no significant impact will result in an unlikely event of inadvertent discovery of human remains during construction of camps facilities and improvements.

Native American and/or Tribal Cultural Resources

As part of the cultural resources identification process, the California Native American Heritage Commission (NAHC) was contacted by letter on February 10, 2017 requesting a review of the Sacred Lands File (SLF), and contact information for Native American groups or individuals that may have concerns about cultural resources in the project area. The response received from NAHC stated that the results of the Sacred Lands File search did not identify the presence of any Native American cultural resources within the project area. The letter included a contact list of 31 Native American individuals or organizations who may have knowledge of cultural resources within the project area (See Appendix C). Letters and emails were sent to each group or individual on February 22 and February 24, 2017. Follow-up phone calls were made on March 10, 2017. Of the 31 parties contacted, 29 groups and individuals did not respond to the letter or

follow up call. A representative for Morongo Band of Mission Indians stated that the Master Plan project is outside of the Morongo Band of Mission Indians traditional territory and had no further comments concerning the project. A representative from Agua Caliente Band of Cahuilla Indians (ACBCI) stated that the project area is not located within the boundaries of the ACBCI Reservation, however, it is within the Tribe's Traditional Use Area (TUA), and requested copies of the records search with associated survey reports and site records from the information center, a cultural resources inventory of the project area by a qualified archaeologist prior to any development activities in this area, and copies of any cultural resource documentation (report and site records) generated in connection with the project.

While no known Native American or tribal cultural resources are located within the Master Plan area, mitigation measures have been identified to ensure that future campus development pursuant to the Master Plan will not significantly affect previously unknown Native American and/or tribal cultural resources.

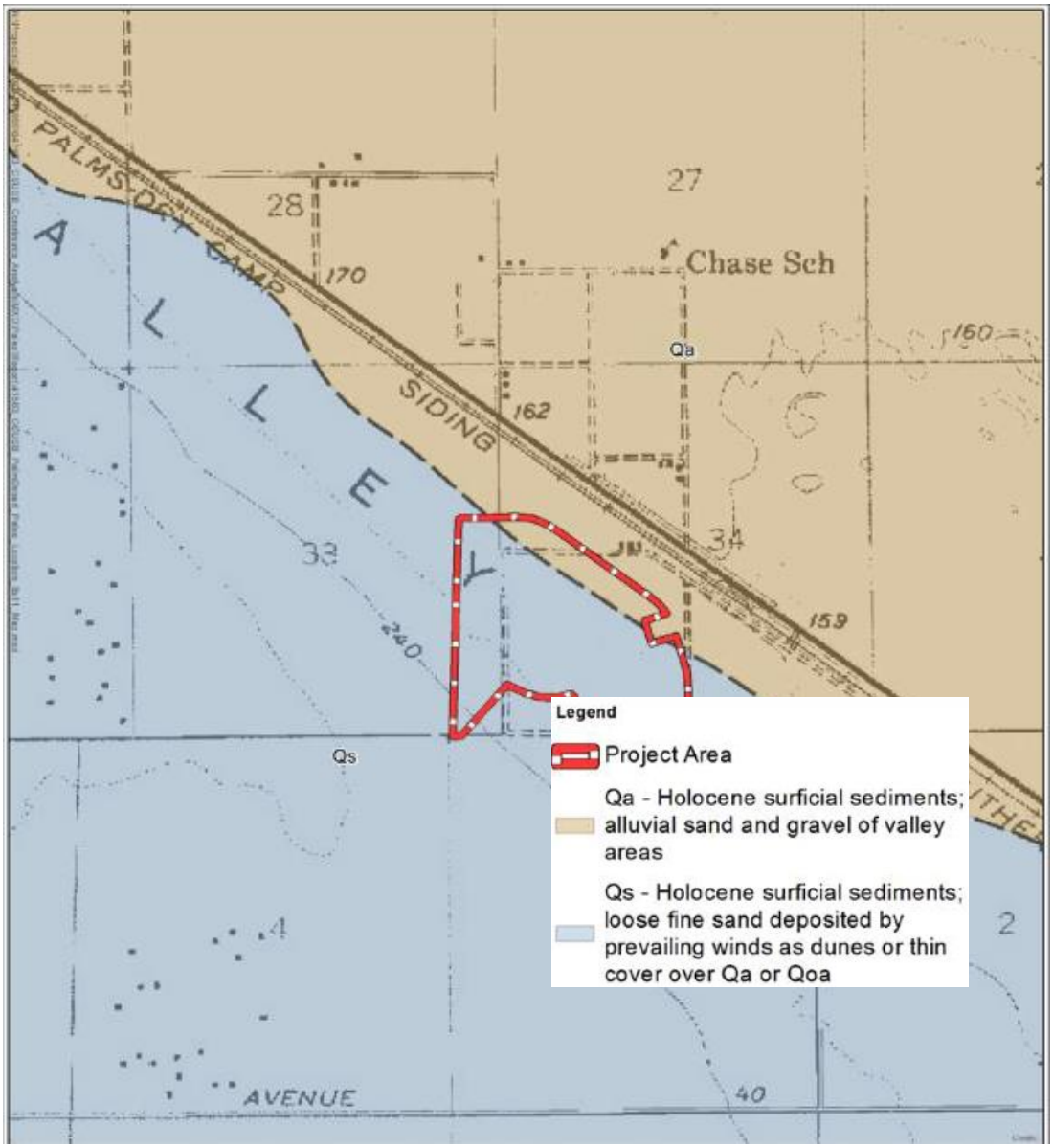
Paleontological Resources

The project site sits in the area northernmost of the Salton Trough, a tectonically active rift valley in the Coachella Valley. The structure of the Salton Trough is largely a product of the ongoing tectonic activity within the San Andreas Fault system. The spreading center, or plate movement, accounts for the active seismicity in the region and is responsible for a large number of young volcanic and geothermal features. During the Pliocene and Pleistocene periods the trough was episodically inundated by marine water. It wasn't until the Holocene (recent) period that the area was inundated with fresh water which formed what is now known as Lake Cahuilla, approximately 10 miles away from the project area.

The campus project area is underlain by modern Holocene-aged alluvial and wind-deposited sediments, as illustrated in Figure 16. These sediments are too young to preserve fossils and therefore have low paleontological sensitivity. However, the sediments increase in age with depth, and thus it is possible that older Pleistocene sediments are present in the subsurface. These sediments have a well-known history of fossil preservation throughout Southern California, including the region surrounding the project area.[5]

[5] Jefferson. 1991, A catalogue of Late Quaternary Vertebrates from California: Part One, nonmarine lower vertebrate and avian taxa. Natural History Museum of Los Angeles County Technical Reports No. 5.
Scott E. and S. Cox. 2008. Late Pleistocene distribution of Bison (Mammalia; Artiodactyla) in the Mojave Desert of Southern California and Nevada. In Wang, X. and L. Barnes, eds. Geology and Vertebrate Paleontology of Western and Southern North America. Natural History Museum of Los Angeles County, Science Series 41: 359-382.
Sc[6] South Coast Air Quality Management District, Greenhouse Gases CEQA Significance Thresholds (http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds)

Figure 16
Geologic Map of the Master Plan Project Area



Source: Dibblee and Minch, 2008

A paleontological records search was requested from the Natural History Museum of Los Angeles County (LACM) and completed in April 2017. The purpose of the records search was to: (1) determine whether any previously recorded fossil localities occur in the project area; (2) assess the potential for disturbance of these localities during construction; and (3) evaluate the paleontological sensitivity of the project area. The records search obtained from the LACM did not find any documented fossil localities within the project area. The closest fossil locality, a specimen of a horse, was found in somewhat similar deposits approximately 10 miles away from

the project area, on the northwest side of Edom Hill near Seven Palms Valley. Because of the established record of fossil perseveration, the older Pleistocene sediments that may be present in the subsurface of the project area, have high paleontological sensitivity. This means that there is a possibility that scientifically significant fossil specimens could be uncovered by construction activity in the project area. Therefore, mitigation measures have been identified to ensure that future campus development pursuant to the Master Plan will not significantly affect previously unknown paleontological resources.

Mitigation Measures

Archaeological Resources

1. If previously unknown archaeological resources are encountered during any phase of construction of the future planned facilities and improvements, the following measures will be implemented:

1.1 Inadvertent Discoveries. If previously unknown buried cultural deposits are encountered during any phase of project construction, all construction work within 60 feet of the deposit will cease and a qualified archaeologist shall be consulted to assess the find. If the discovery is determined to be Native American in origin, the project archaeologist will consult with CSUSB Palm Desert to continue Native American consultation procedures. As part of this process, it may be determined that a Native American monitor will be required. If the discovery is determined to be not significant, work will be permitted to continue in the area. If a discovery is determined to be significant, a mitigation plan should be prepared and carried out in accordance with state guidelines. If the resource cannot be avoided, a data recovery plan should be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions. Any cultural material collected as part of an assessment or data recovery effort should be curated at a qualified facility. Field notes and other pertinent materials should be curated along with the archaeological collection.

Native American and/or Tribal Cultural Resources

2. If previously unknown Native American cultural resources or tribal cultural resources are encountered during any phase of construction of the future planned facilities and improvements, the following measures will be implemented:

2.1 All work in the immediate vicinity of the find (within a 60-foot buffer) will cease and (1) a qualified archaeologist meeting the Secretary of Interior (SOI) standards will assess the find, and (2) Agua Caliente Band of Cahuilla Indians will be

contacted and provided information about the find and invited to perform a site visit when the archeologist makes the assessment to provide Tribal input.

2.2 If significant Native American resource is discovered and avoidance cannot be ensured, an SOI-qualified archeologist will be retained to develop a cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, which will be provided to the Agua Caliente Band of Cahuilla Indians for review and comment.

2.3 All in-field investigations, assessments, and/or data recovery enacted pursuant to the final Treatment Plan will be monitored by the Agua Caliente Band of Cahuilla Indians Tribal Participant(s).

2.4 The University will consult in good faith with Agua Caliente Band of Cahuilla Indians on the dispositions and treatment of any artifacts or cultural resources encountered during any phase of construction of the future planned facilities and improvements.

2.5 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner will be contacted pursuant to State Health and Safety Code §7050.5 and Public Resources Code Section 5097.98 and that code enforced for the duration of the project.

Paleontological Resources

No mitigation measures are recommended for areas mapped as Holocene alluvium (Qa) or wind-blown deposits (Qs) for shallow excavations, less than 5 feet deep (see Figure 16). Paleontological monitoring is recommended at locations where construction excavation in these deposits will exceed a depth of 5 feet deep and might impact underlying sediments with high paleontological sensitivity. As construction proceeds at any given location within the project area, the Project Paleontologist may re-evaluate the sensitivity of the subsurface and the level of monitoring required (for example, after 25% of the excavation work has been completed). Without the presence of certain fossil taxa, it is generally infeasible to determine the age of sediments (Holocene versus Pleistocene) in the field with any degree of accuracy. Therefore, decisions concerning the depth at which paleontological monitoring is warranted are necessarily based on geologic observations, inference, and the possible paleontological sensitivity in relation to depth.

3.1 A professional paleontologist will be retained by the University to develop a Paleontological Mitigation and Monitoring Plan for the project.

3.2 Based on the results of this analysis, there are no fossils on the ground surface within the project area, and only a low likelihood that fossils are present in the shallow subsurface. Construction activities that exceed a depth of 5 feet will have a higher likelihood of adversely impacting scientifically significant

paleontological resources. Therefore, excavations that exceed 5 feet in depth throughout the project area will be monitored for paleontological resources by a qualified paleontologist, in accordance with the professional standards of the SVP (2010). Should the monitoring results of initial project work (i.e., after 25% of excavation work is completed at any given location within the project area) indicate that the paleontological sensitivity of the subsurface sediments within that portion of the project area is lower than anticipated, the monitoring level of effort will be decreased accordingly, as determined by the Project Paleontologist. If the monitoring results indicate that the paleontological sensitivity of the subsurface sediments within portions of the project area are higher than anticipated, the monitoring level of effort will continue or increase accordingly.

3.3 If any subsurface fossils are encountered during construction and a paleontological monitor is not present, a qualified paleontologist will be notified immediately, and work in the immediate area (within 50 feet) of the discovery will cease until the significance of the discovery can be evaluated.

Level of Impact After Mitigation

Implementation of the identified mitigation measures, and continued compliance with existing laws and regulations will ensure that future campus development pursuant to the Master Plan will result in no significant impact on cultural resources.

3.4 Traffic and Circulation

This section discusses overall traffic and circulation issues associated with the CSU San Bernardino, Palm Desert Campus 2016 Campus Master Plan. A Transportation Impact Study was prepared for the Campus Master Plan in March, 2017 by Fehr & Peers. The study findings are summarized below, and the study is included in Appendix D of this EIR.

Environmental Setting

The CSU San Bernardino Palm Desert Campus (PDC) is located in the City of Palm Desert, south of the Interstate 10 (I-10) freeway. The surrounding land uses include commercial uses to the north and west of the campus, and residential uses with golf courses to the south and east of the campus.

Roadway Network

Primary regional access to Palm Desert campus (PDC) is provided by I-10 freeway via the I-10/Cook Street interchange. I-10 freeway provides east-west regional connection. The major streets and arterials that service the campus and the surrounding area include: Cook Street, Country Club Drive, Frank Sinatra Drive, Gerald Ford Drive and Portola Avenue. The following is a brief description of the roadways.

I-10 is a six lane uninterrupted highway oriented east-west and is north of the CSU San Bernardino PDC. I-10 west of the project site passes through Palm Springs, San Bernardino, Los Angeles and terminates in Santa Monica. I-10 east of the project site provides access to desert cities such as Indio and Coachella.

Cook Street runs north-south from I-10 to State Route 111 (SR-111) as an arterial roadway with predominately two travel lanes in each direction with separate left and right turn lanes. There is a raised, landscaped median through most of the segment. Speed limits range from 50 to 55 mph and there are various residential, commercial, and recreational land uses along the facility. Cook Street is located adjacent to CSU San Bernardino PDC to the west. Through most of the study area (i.e. the segment portion between I-10 and Frank Sinatra Drive), the facility provides three travel lanes in each direction.

Country Club Drive runs east-west through the City of Palm Desert from Monterey Avenue to Washington Street and is designated as an arterial roadway. It is surrounded by residential and recreational land uses. There are two traffic lanes serving each direction, as well as left and right turn lanes. There is also a raised, landscaped median along its entire span.

Frank Sinatra Drive (west of El Dorado Drive) runs from Monterey Avenue to El Dorado Drive. This east-west roadway provides two travel lanes in each direction and left and right turn lanes, with a raised median dividing each direction. The speed limit is 55 mph. Frank Sinatra Drive runs through both residential and commercial land uses. East of El Dorado Drive, this roadway continues as Tamarisk Row Drive, a secondary roadway.

Gerald Ford Drive (west of Cook Street) runs east-west from Monterey Avenue to Cook Street. Gerald Ford Drive provides two travel lanes in each direction west of Portola Avenue, and one travel lane in each direction from Portola Avenue to Cook Street. The speed limit ranges from 50 to 55 mph. Left and right turn lanes are provided along with a raised, landscaped median. Residential land uses are predominantly present around Gerald Ford Drive.

East of Cook Street, Gerald Ford Drive curves southward before it terminates at its intersection with Frank Sinatra Drive. Within this segment, the roadway is divided via medians and two lanes are provided in the north/west direction, and one lane is provided in the south/east direction.

Portola Avenue (north of Magnesia Falls Drive) is designated as an arterial roadway running north-south from I-10 to Magnesia Falls Drive, through a mix of residential and commercial land uses. Two to three travel lanes are provided in each direction. Most of this segment does not have a median. The speed limit ranges from 50 to 60 mph. Portola Avenue continues south of Magnesia Falls Drive as a thoroughfare roadway, and south of Haystack Road as a secondary roadway.

Transit

Bus access is provided to the campus via SunLine Transit Route 53, which connects the campus to activity centers in the City of Palm Desert such as the Palm Desert Mall, City Hall, and the College of the Desert. Line 53 runs through Palm Desert traversing through and providing service along Cook Street, Portola Avenue, SR-111, and Fred Waring Drive. The line provides service seven days a week, from approximately 6:30 AM to 6:45 PM on weekdays, and 9:00 AM to 6:25 PM on weekends. Headways are 40 to 60 minutes on weekdays and 80 minutes on weekends.

CSU San Bernardino provides shuttle service to connect the San Bernardino main campus to the PDC. Currently, two shuttles operate, each making one trip in the morning and another trip in the evening. The shuttle bus can transport 29 passengers at a time and gives PDC students the ability to take courses at the main campus needed to complete their majors. The shuttles run Monday through Friday during the academic year and do not run on weekends or on University holidays. The PDC shuttle pick-up and drop-off location is at the turnaround between the Indian Wells Center and the Health Science Building, and the San Bernardino main campus shuttle pick-up and drop-off location is at the turnout between Parking Lot D and the Commons.

Bicycle and Pedestrian Facilities

The City of Palm Desert has made a concerted effort to expand the ease of alternative transportation options for residents, recognizing both health and environmental benefits. This includes the expansion of bicycle facilities that increase connectivity between residential, recreational, commercial, and other community amenities throughout the city.

The City has also focused on the use of golf carts beyond golf courses onto public streets and private roads as a safe, convenient, and environmentally-friendly transportation mode through its Golf Cart Transportation Program. Thus, bicycles and golf carts share an extensive system of shared and separated facilities along Palm Desert's roadways.

Palm Desert has many bicycle facilities, including one that provides direct access to the PDC on Frank Sinatra Drive. Dedicated bicycle facilities in the study area are also located on Gerald Ford Drive west of Cook Street, Cook Street south of Frank Sinatra Drive, as well as along University Park Drive, College Drive, Portola Avenue, Frank Sinatra Drive, and Country Club Drive.

The pedestrian network in the study area consists of sidewalks, pedestrian crosswalks, and pedestrian crossing controls. Internal walkways and sidewalks serve as connecting facilities for students and faculty conducting general activities around campus. Sidewalks are also provided along Cook Street adjacent to campus, along the easterly segments of Berger Road where they serve the adjacent surface parking, and along Berger Drive South. Despite the presence of pedestrian facilities within and around the campus, dedicated pedestrian sidewalk access and crosswalks from the surface parking spaces along Berger Road into the main part of campus are currently lacking. Additionally, connectivity from the shuttle stop area to the main campus is not provided.

External pedestrian facilities, including sidewalks, are present along the majority of the existing streets. Generally, sidewalk conditions in and around the study area are in favorable condition and free of cracks or uplifts. Sidewalk buffers, which create a more walkable environment with some degree of separation between pedestrians and motorists, are present at many locations. Despite the presence of landscaped buffers and well maintained sidewalks, it should be noted that there is a lack of shade, which can be an issue in an area with desert climate and with hot summer weather. Additionally, on some roadways there are issues with sidewalk continuity, with sidewalks ending suddenly or only provided on one side of the road.

Existing Traffic Conditions

Traffic operational conditions at intersections are described in terms of Level of Service (LOS) which ranges from LOS A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity conditions.

A total of 9 intersections were analyzed based on AM and PM peak hour turning movement volumes, lane configurations, and signal phasing information collected for the project. Figure 17 illustrates the location of the study intersections and Table 2 summarizes the LOS results for

each intersection during the AM and PM peak hours. As shown, all of the study intersections are currently operating at LOS D or better.

Figure 17
Project Location and Study Intersections

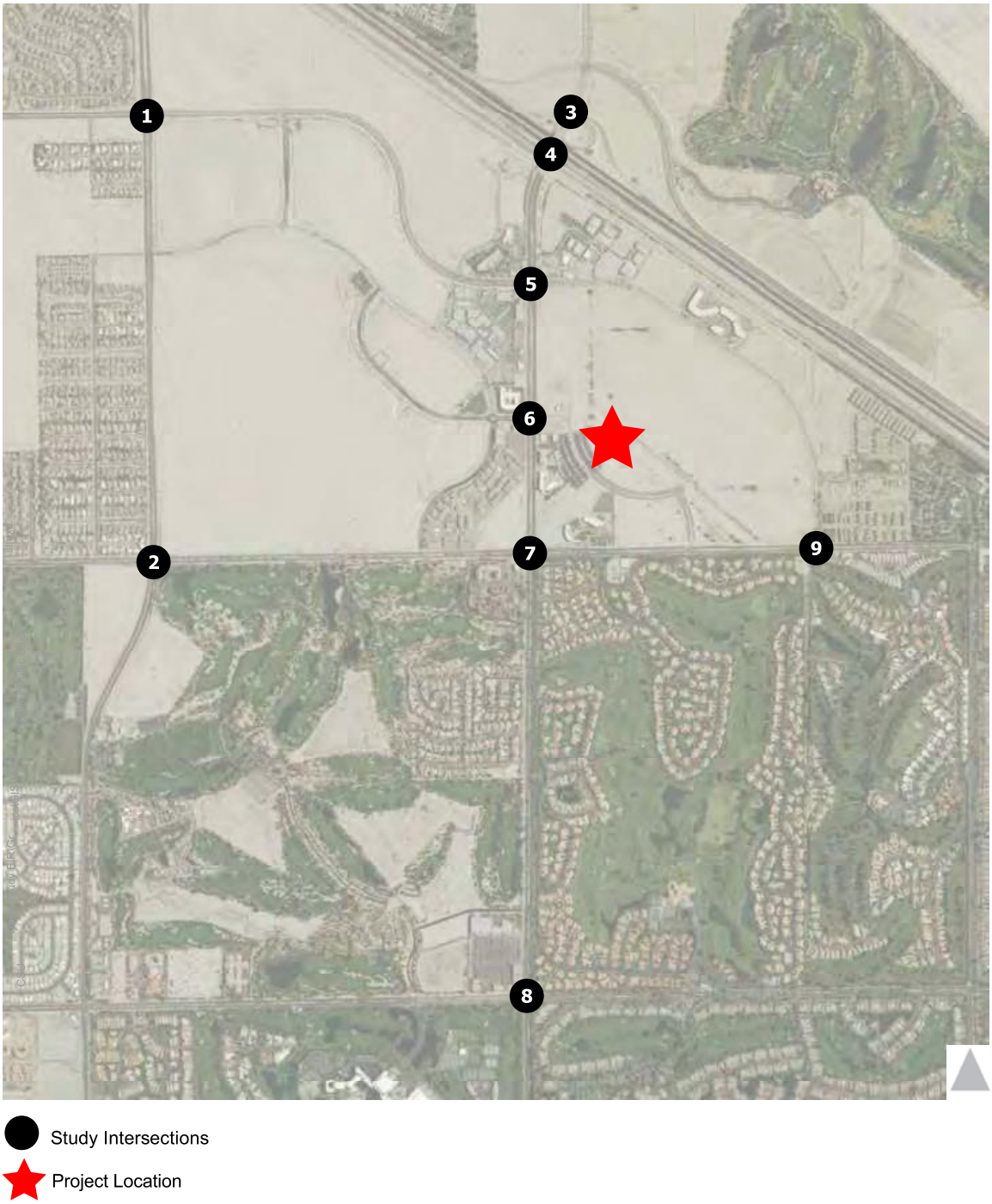


Table 2. Existing Peak Hour Intersection LOS Summary

No.	Intersection	Control[1]	Peak Hour	Existing	
				Delay[2]	LOS[3]
1.	Portola Avenue & Gerald Ford Drive	Signal	AM PM	18.0 18.3	B B
2.	Portola Avenue & Frank Sinatra Drive	Signal	AM PM	35.2 27.9	D C
3.	Cook Street & I-10 Westbound Ramps	Signal	AM PM	13.1 9.0	B A
4.	Cook Street & I-10 Eastbound Ramps	Signal	AM PM	17.0 10.9	B B
5.	Cook Street & Gerald Ford Drive	Signal	AM PM	28.3 31.8	C C
6.	Cook Street & University Park Drive/Berger Drive	Signal	AM PM	16.1 16.8	B B
7.	Cook Street & Frank Sinatra Drive	Signal	AM PM	22.9 22.7	C C
8.	Cook Street & Country Club Drive	Signal	AM PM	36.7 35.8	D D
9.	Gerald Ford Drive & Frank Sinatra Drive	Signal	AM PM	12.3 12.8	B B

Note:
Source: Fehr & Peers, 2017
[1] Signal = Signalized intersection.
[2] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.
[3] Intersections LOS calculations were conducted using Synchro 9.1 Build 909, LOS calculations were performed using the methods described in the Highway Capacity Manual (HCM) 2010.

Impact Criteria

The California State University Transportation Impact Study Manual (2012) provides guidance to determine whether the transportation-related impacts of a proposed project will be significant. The California State University Transportation Impact Study Manual provides guidance to determine whether the transportation-related impacts of a proposed project will be significant. For intersections, a significant impact will occur when:

- An intersection operates at LOS D or better under a no project scenario and the addition of project trips causes overall traffic operations on the facility to operate at LOS E or F.

- An intersection operates at LOS E or F under a no project scenario and the project adds both 10 or more peak hour trips and five seconds or more of peak hour delay, during the same peak hour.
- If an intersection operates at a very poor LOS F (control delay of 120 seconds or more), the significance criterion shall be an increase in v/c ration of 0.02 or more.
- The addition of project traffic causes an all-way stop-controlled or side street stop-controlled intersection to meet Caltrans signal warrant criteria.

The California Department of Transportation (Caltrans) developed the Guide for the Preparation of Traffic Impact Studies (December 2002) to provide standards and guidelines for the analysis of traffic impacts generated by local development and land use change proposals that affect traffic along state highway facilities. LOS standards for intersections under the jurisdiction of Caltrans requires State-controlled intersections to be at the target threshold of LOS C, as measured using the HCM 2010 intersection methodology. The following study intersections are under Caltrans jurisdiction:

3. Cook Street & I-10 Westbound Ramps
4. Cook Street & I-10 Eastbound Ramps

For freeway segments, under Caltrans guidelines, a significant impact will occur at a freeway mainline segment when the project-related traffic causes:

- A freeway mainline segment to degrade from an acceptable LOS C or better to LOS D, E or F, or
- An increase in density for freeway mainline segments already operating at LOS D, E or F.

For pedestrian, bicycle, and transit, a significant impact will occur when:

- A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.
- A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities.
- A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.
- A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.

Vehicles Miles Traveled

In addition, the traffic analysis also considers vehicle miles traveled (VMT) based on Senate Bill 743 (SB 743). Under SB 743, the focus of transportation analysis shifted from Level of Service (LOS) analysis to vehicle miles traveled.

Environmental Impact

Project Trip Generation and Trip Distribution

As shown in Table 2, a full buildout of the CSU San Bernardino Palm Desert Campus Master Plan is estimated to generate 15,734 net new daily trips. These trips will result in an addition of up to 1,445 AM peak hour trips and 1,657 PM peak hour trips to the existing roadway system (with 1,247 trips in and 198 trips out during the AM peak, and 661 in and 996 out during the PM peak).

Table 3. Trip Generation Summary

Trip Generation Rates								
User Type	**Unit**	**Daily Rate**	**AM Peak Hour**			**PM Peak Hour**		
			Rate	**In**	**Out**	**Rate**	**In**	**Out**
On-Campus Student	FTE	1.96	0.017	0.015	0.002	0.050	0.020	0.030
Off-Campus Student	FTE	2.07	0.189	0.163	0.026	0.181	0.072	0.109
Faculty & Staff	FTE	1.83	0.322	0.277	0.045	0.667	0.266	0.401
Existing CSUSB Palm Desert Campus Trip Generation Estimates								
User Type	**Amount**	**Daily**	**AM Peak Hour**			**PM Peak Hour**		
			Total	**In**	**Out**	**Total**	**In**	**Out**
Off-Campus Student (FTE)[1]	987	2,043	187	161	26	179	71	108
Faculty & Staff (FTE)[2]	99	181	32	27	5	66	26	40
Existing Total		***2,224***	***219***	***188***	***31***	***245***	***97***	***148***
Master Plan Buildout CSUSB Palm Desert Campus Trip Generation Estimates								
On-Campus Student (FTE)	616	1,207	10	9	1	31	13	18

Off-Campus Student (FTE)	7,384	15,285	1,396	1,204	192	1,337	532	805
Faculty & Staff (FTE)[2]	801	1,466	258	222	36	534	213	321
Master Plan Buildout Total		***17,958***	***1,664***	***1,435***	***229***	***1,902***	***758***	***1,144***
Existing Total		***-2,224***	***-219***	***-188***	***-31***	***-245***	***-97***	***-148***
Total Net New Trips		**15,734**	**1,445**	**1,247**	**198**	**1,657**	**661**	**996**

Note:
Source: Fehr & Peers, 2016 & 2017
[1] Student housing is not currently available on campus. All existing students are considered as off-campus students.
[2] The quantity of faculty and staff at PDC is estimated using the same faculty/staff-to-student ratio as the existing CSUSB Main Campus.

The geographic distribution of trips generated by the project is dependent on characteristics of the street system serving the project site; the level of accessibility of routes to and from PDC; the locations of complementary land uses, and existing travel patterns in the area. In addition, current residences of PDC students were a key resource in refining the project's regional and local distribution. The following general trip distribution pattern was estimated for the project-generated traffic under Existing Conditions:

- 39% to/from the I-10 Freeway East
- 32% to/from the I-10 Freeway West
- 2% to/from Frank Sinatra East
- 6% to/from Frank Sinatra West
- 3% to/from Gerald Ford West
- 2% to/from Country Club East
- 2% to/from Country Club West
- 5% to/from Portola Avenue South
- 9% to/from Cook Street South

By 2035, future development in the study area, such as the University Neighborhood Specific Plan, will shift traffic patterns in the project area and directly affect the distribution of project-generated vehicle trips. Therefore, the project trip distribution for the Future Plus Project (2035) Conditions are slightly different from Existing Plus Project (2016) Conditions. Campus-wide trips were regionally distributed as follows:

- 38% to/from the I-10 Freeway East
- 31% to/from the I-10 Freeway West
- 2% to/from Frank Sinatra East
- 6% to/from Frank Sinatra West
- 3% to/from Gerald Ford West
- 2% to/from Country Club East

- 2% to/from Country Club West
- 5% to/from Portola Avenue South
- 9% to/from Cook Street South,
- 2% to/from the University Neighborhood

As shown in this trip distribution, it is assumed that some of the project traffic in the future will traverse to/from the City's planned uses within its University Neighborhood Specific Plan area, which is located west of PDC.

Intersections

Existing Plus Project (2016) Conditions

Existing Plus Project (2016) Conditions traffic volumes were forecast by applying the project-related peak hour trips as described in the previous section to the existing traffic volumes. The results of the Existing Plus Project (2016) Conditions intersection operations are summarized in Table 4. The LOS analysis results indicate that all the study intersections are projected to operate at LOS D or better, except for the intersection of Cook Street and I-10 Eastbound Ramps during the PM peak hour.

As summarized in Table 4, the addition of project traffic is projected to result in a significant impact at two of the study intersections:

- Cook Street & I-10 Westbound Ramps
- Cook Street & I-10 Eastbound Ramps

Table 4. Existing Plus Project (2016) Conditions Peak Hour Intersection LOS Summary

No.	Intersection	Traffic Control[1]	Peak Hour	Existing Conditions		Existing Plus Project (2016) Conditions		Δ Delay	Impact (Y/N)
				Delay[2]	LOS[3,4]	Delay[2]	LOS[3,4]		
1.	Portola Avenue & Gerald Ford Drive	Signal	AM PM	18.0 18.3	B B	18.1 18.3	B B	0.1 0.0	N N
2.	Portola Avenue & Frank Sinatra Drive	Signal	AM PM	35.2 27.9	D C	36.5 29.6	D C	1.3 1.7	N N
3.	Cook Street & I-10 Westbound Ramps[5]	Signal	AM PM	13.1 9.0	B A	43.9 11.0	**D** B	**30.8** 2.0	**Y** N
4.	Cook Street & I-10 Eastbound Ramps[5]	Signal	AM PM	17.0 10.9	B B	33.1 86.8	C **F**	16.1 **75.9**	N **Y**
5.	Cook Street & Gerald Ford Drive	Signal	AM PM	28.3 31.8	C C	40.3 29.5	D C	12.0 -2.3	N N
6.	Cook Street & University Park Drive/Berger Drive	Signal	AM PM	16.1 16.8	B B	23.3 23.1	C C	7.2 6.3	N N
7.	Cook Street & Frank Sinatra Drive	Signal	AM PM	22.9 22.7	C C	28.7 34.3	C C	5.8 11.6	N N

8.	Cook Street & Country Club Drive	Signal	AM PM	36.7 35.8	D D	36.9 36.1	D D	0.2 0.3	N N
9.	Gerald Ford Drive & Frank Sinatra Drive	Signal	AM PM	12.3 12.8	B B	12.4 12.8	B B	0.1 0.0	N N

Notes:
Source: Fehr & Peers, 2017
[1] Signal = Signalized intersection.
[2] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.
[3] LOS = Level of Service. Impacts are noted in **Bold**.
[4] Intersection LOS calculations were conducted using Synchro 9.1 Build 909. LOS calculations were performed using the methods described in Highway Capacity Manual (HCM) 2010.
[5] Caltrans facility.

Improvements

The following improvements are identified for the Existing Plus Project (2016) Conditions.

Cook Street & I-10 Westbound Ramps

With the following improvement, the operations at the intersection will improve to LOS B in the AM peak hour and LOS A in the PM peak hour.

- Restriping the westbound approach from one shared through/left-turn lane and one right-turn lane to one left-turn lane and one shared left-turn/through/right-turn lane.

Cook Street & I-10 Eastbound Ramps

With the following improvements, the operations at the intersection will improve to LOS C in the AM peak hour and LOS B in the PM peak hour.

- Restriping the northbound approach from two through lanes and one shared through/right-turn lane to one through lane, one shared through/right-turn lane, and one right-turn lane.
- Continue restriction of pedestrian crossing at the east leg (on-ramp) for pedestrian safety.

Future Without Project (2035) Conditions

The Future Without Project (2035) Conditions were estimated by modifying General Plan Buildout (2035) volume projections presented in the *Palm Desert General Plan*. The updated General Plan derived traffic forecasts using the Palm Desert Traffic Analysis Model (PDTAM). Under the Future Without Project (2035) Conditions, the following roadway network improvements were included as part of the analyses:

- The completion of a new I-10 Freeway interchange at Portola Avenue (FTIP Project ID RIV031209)
- A new network of local streets west of the campus site as part of the University Neighborhood Specific Plan

- As part of the University Neighborhood Specific Plan effort, the stretch of Cook Street boarding the PDC between Gerald Ford Drive in the north and Frank Sinatra Drive in the south would be reduced to two lanes in each direction. The assumed resulting study intersection lane configuration changes are:

    - ***Cook Street & University Park Drive/Berger Drive*** – The northbound approach will be reconfigured from a separate left-turn lane, three through lanes, and a separate right-turn lane into a separate left-turn lane, two through lanes, and a separate right-turn lane, while the southbound approach will be reconfigured from dual left-turn lanes, three through lanes, and a separate right-turn lane into dual left-turn lanes, two through lanes, and a separate right-turn lane with the Cook Street road diet in place.

    - ***Cook Street & Frank Sinatra Drive*** – The southbound approach will be reconfigured from dual left-turn lanes, three through lanes, and a separate right-turn lane into dual left-turn lanes, two through lanes, and a separate right-turn lane with the Cook Street road diet in place.

The results of the Future Without Project (2035) Conditions intersection operations are summarized in Table 5. As shown, all the intersections are forecast to operate at acceptable LOS during the peak hours.

Table 5. Future Without Project (2035) Conditions Peak Hour Intersection LOS Summary

No.	Intersection	Control[1]	Peak Hour	Future Without Project (2035) Conditions	
				Delay[2]	LOS[3]
1.	Portola Avenue & Gerald Ford Drive	Signal	AM PM	20.5 22.5	C C
2.	Portola Avenue & Frank Sinatra Drive	Signal	AM PM	25.3 25.9	C C
3.	Cook Street & I-10 Westbound Ramps	Signal	AM PM	10.3 8.8	B A
4.	Cook Street & I-10 Eastbound Ramps	Signal	AM PM	11.6 9.7	B A
5.	Cook Street & Gerald Ford Drive	Signal	AM PM	27.0 33.3	C C
6.	Cook Street & University Park Drive/Berger Drive	Signal	AM PM	27.1 23.5	C C
7.	Cook Street & Frank Sinatra Drive	Signal	AM PM	25.6 24.2	C C
8.	Cook Street & Country Club Drive	Signal	AM PM	39.0 39.2	D D

9.	Gerald Ford Drive & Frank Sinatra Drive	Signal	AM PM	13.3 14.7	B B

Note:
Source: Fehr & Peers, 2017
[1] Signal = Signalized intersection.
[2] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.
[3] Intersections LOS calculations were conducted using Synchro 9.1 Build 909, LOS calculations were performed using the methods described in the Highway Capacity Manual (HCM) 2010.

Future Plus Project (2035) Conditions

Future Plus Project (2035) Conditions traffic volumes are included in the PDC 2016 Master Plan in its traffic projections. Thus, the traffic projections for the City General Plan Buildout (2035) scenario were assumed at shared study locations, while locations not studied in the General Plan update were appropriately interpolated. The resulting Cumulative (2035) Plus Project traffic volumes are summarized in Table 6. The LOS analysis results indicate that all the study intersections are projected to operate at LOS D or better, except for the intersection of Cook Street and University Park Drive/Berger Drive during the AM peak hour.

As summarized in Table 6, the addition of project traffic is projected to result in a significant impact at one of the study intersections:

- Cook Street & University Park Drive/Berger Drive (LOS F – AM)

Table 6. Future Plus Project (2035) Conditions Peak Hour Intersection LOS Summary

No.	Intersection	Traffic Control[1]	Peak Hour	Future Without Project (2035) Conditions		Future Plus Project (2035) Conditions		Δ Delay	Impact (Y/N)
				Delay[2]	LOS[3,4]	Delay[2]	LOS[3,4]		
1.	Portola Avenue & Gerald Ford Drive	Signal	AM PM	20.5 22.5	C C	20.5 22.0	C C	0.0 -0.5	N N
2.	Portola Avenue & Frank Sinatra Drive	Signal	AM PM	25.3 25.9	C C	26.4 27.6	C C	1.1 1.7	N N
3.	Cook Street & I-10 Westbound Ramps[5]	Signal	AM PM	10.3 8.8	B A	18.5 11.1	B B	8.2 2.3	N N
4.	Cook Street & I-10 Eastbound Ramps[5]	Signal	AM PM	11.6 9.7	B A	32.0 16.5	C B	20.4 6.8	N N
5.	Cook Street & Gerald Ford Drive	Signal	AM PM	27.0 33.3	C C	27.7 33.2	C C	0.7 -0.1	N N
6.	Cook Street & University Park Drive/Berger Drive	Signal	AM PM	27.1 23.5	C C	112.9 36.3	**F** D	**85.8** 12.8	**Y** N
7.	Cook Street & Frank Sinatra Drive	Signal	AM PM	25.6 24.2	C C	24.6 30.5	C C	-1.0 6.3	N N
8.	Cook Street & Country Club Drive	Signal	AM PM	39.0 39.2	D D	34.6 38.2	C D	-4.4 1.0	N N

9.	Gerald Ford Drive & Frank Sinatra Drive	Signal	AM PM	13.3 14.7	B B	13.4 14.7	B B	0.1 0.0	N N

Notes:
Source: Fehr & Peers, 2017
[1] Signal = Signalized intersection.
[2] Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.
[3] LOS = Level of Service. Impacts are noted in **Bold**.
[4] Intersection LOS calculations were conducted using Synchro 9.1 Build 909. LOS calculations were performed using the methods described in Highway Capacity Manual (HCM) 2010.
[5] Caltrans facility.

I-10 Freeway

Existing Plus Project (2016) Conditions

A total of six freeway basic segments (three westbound and three eastbound) and five ramp locations (three westbound and two eastbound) were analyzed along I-10. Table 7 summarizes the LOS results for the study locations during the AM and PM peak hours. As shown, the following freeway locations are forecast to operate unacceptably (LOS D, E, or F) during the AM or PM peak hours under the Existing Plus Project (2016) Conditions:

I-10 Westbound

- Washington Street On-Ramp to Cook Street Off-Ramp (LOS E – AM peak hour; LOS F – PM peak hour)
- Cook Street Off-Ramp (LOS E – AM peak hour; LOS F – PM peak hour)
- Cook Street Off-Ramp to Cook Street On-Ramp (LOS E – PM peak hour)
- Cook Street Slip On-Ramp (LOS D – PM peak hour)
- Cook Street Slip On-Ramp and Monterey Avenue Off-Ramp (LOS D – AM peak hour; LOS F – PM peak hour)

Based on Caltrans' thresholds of significance, the following freeway locations are forecast to be significantly impacted under the Existing Plus Project (2016) Conditions:

I-10 Westbound

- Washington Street On-Ramp to Cook Street Off-Ramp (AM and PM peak hours)
- Cook Street Off-Ramp (AM and PM peak hours)
- Cook Street Slip On-Ramp (PM peak hour)
- Cook Street Slip On-Ramp and Monterey Avenue Off-Ramp (AM and PM peak hours)

Table 7. Existing Plus Project (2016) Conditions Peak Hour Freeway LOS Summary

Segment	Type	Existing Conditions				Existing Plus Project (2016) Conditions				Δ Density		Impact (Y/N)	
		AM		PM		AM		PM					
		Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]	AM	PM	AM	PM
I-10 Westbound													

Washington Street On-Ramp to Cook Street Off-Ramp	Basic	32.6	**D**	42.7	**E**	38.4	**E**	-	**F**	5.8	-	**Y**	**Y**
Cook Street Off-Ramp	Diverge	35.1	**E**	38.8	**E**	38.3	**E**	-	**F**	3.2	-	**Y**	**Y**
Cook Street Off-Ramp to Cook Street On-Ramp	Basic	25.5	C	36.2	**E**	25.5	C	36.2	**E**	0.0	0.0	N	N
Cook Street Loop On-Ramp	Merge	17.7	B	24.7	C	18.2	B	27.3	C	0.5	2.6	N	N
Cook Street Slip On-Ramp	Merge	21.3	C	26.8	C	21.6	C	28.0	**D**	0.3	1.2	N	**Y**
Cook Street Slip On-Ramp to Monterey Avenue Off-Ramp	Basic	28.8	**D**	-	**F**	29.4	**D**	-	**F**	0.6	-	**Y**	**Y**
I-10 Eastbound													
Monterey Avenue On-Ramp to Cook Street Off-Ramp	Basic	17.7	B	20.2	C	20.2	C	22.1	C	2.5	1.9	N	N
Cook Street Off-Ramp	Diverge	16.6	B	18.6	B	20.0	C	20.6	C	3.4	2.0	N	N
Cook Street Off-Ramp to Cook Street On-Ramp	Basic	12.9	B	17.0	B	12.9	B	17.5	B	0.0	0.5	N	N
Cook Street On-Ramp	Merge	18.1	B	24.3	C	18.7	B	27.9	C	0.6	3.6	N	N
Cook Street On-Ramp to Washington Street Off-Ramp	Basic	15.3	B	21.4	C	15.8	B	24.5	C	0.5	3.1	N	N

Notes:
Source: Fehr & Peers, 2017
[1] Density reported as passenger cars per mile per lane.
[2] **Bold** indicates unacceptable operations.

Future Plus Project (2035) Conditions

Table 8 summarizes the LOS results for the study freeway segments during the AM and PM peak hours. As shown, all six westbound, and four of the five eastbound freeway locations are forecast to operate unacceptable (LOS D, E, or F) during the AM and/or PM peak hours under the Future Plus Project (2035) Conditions.

Based on Caltrans' thresholds of significance, the following freeway locations are forecast be significantly impacted by the project under the Future Plus Project (2035) Conditions:

I-10 Westbound

- Washington Street On-Ramp to Cook Street Off-Ramp (AM and PM peak hours)
- Cook Street Off-Ramp (AM and PM peak hours)
- Cook Street Loop On-Ramp (PM peak hour)
- Cook Street Slip On-Ramp (PM peak hour)
- Cook Street Slip On-Ramp and Portola Avenue Off-Ramp (AM and PM peak hours)

I-10 Eastbound

- Portola Avenue On-Ramp to Cook Street Off-Ramp (AM and PM peak hours)
- Cook Street On-Ramp (AM and PM peak hours)
- Cook Street On-Ramp to Washington Street Off-Ramp (AM and PM peak hours)

Table 8. Future Plus Project (2035) Conditions Peak Hour Freeway LOS Summary

Segment	Type	Future Without Project (2035) Conditions				Future Plus Project (2035) Conditions				Δ Density		Impact (Y/N)	
		AM		PM		AM		PM					
		Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]	AM	PM	AM	PM
I-10 Westbound													
Washington Street On-Ramp to Cook Street Off-Ramp	Basic	39.2	**E**	-	**F**	43.8	**E**	-	**F**	4.6	-	**Y**	**Y**
Cook Street Off-Ramp	Diverge	37.3	**E**	-	**F**	39.4	**E**	-	**F**	2.1	-	**Y**	**Y**
Cook Street Off-Ramp to Cook Street On-Ramp	Basic	31.8	**D**	-	**F**	31.8	**D**	-	**F**	0.0	-	N	N
Cook Street Loop On-Ramp	Merge	20.1	C	-	**F**	20.4	C	-	**F**	0.3	-	N	**Y**
Cook Street Slip On-Ramp	Merge	24.0	C	-	**F**	24.2	C	-	**F**	0.2	-	N	**Y**
Cook Street Slip On-Ramp to Portola Avenue Off-Ramp	Basic	35.8	**E**	-	**F**	36.3	**E**	-	**F**	0.5	-	**Y**	**Y**
I-10 Eastbound													
Portola Avenue On-Ramp to Cook Street Off-Ramp	Basic	29.8	**D**	30.0	**D**	32.2	**D**	31.2	**D**	2.4	1.2	**Y**	**Y**
Cook Street Off-Ramp	Diverge	25.7	C	25.6	C	27.4	C	26.4	C	1.7	0.8	N	N
Cook Street Off-Ramp to Cook Street On-Ramp	Basic	25.1	C	26.4	**D**	25.1	C	26.4	**D**	0.0	0.0	N	N
Cook Street On-Ramp	Merge	28.3	**D**	30.6	**D**	28.7	**D**	32.6	**D**	0.4	2.0	**Y**	**Y**
Cook Street On-Ramp to Washington Street Off-Ramp	Basic	27.6	**D**	30.6	**D**	28.0	**D**	33.0	**D**	0.4	2.4	**Y**	**Y**

Notes:
Source: Fehr & Peers, 2017
[1] Density reported as passenger cars per mile per lane.
[2] **Bold** indicates unacceptable operations.

Vehicle Miles Traveled (VMT)

Vehicle miles traveled (VMT) is measured by multiplying the number of trips generated by the project by the average trip length. For this assessment, project VMT was calculated by multiplying the number of daily trips generated by the project by the estimated average trips lengths; after accounting for the different trip lengths associated with different types of campus users (on-campus students, off-campus students, and campus faculty and staff).

The average trip lengths were estimated for off-campus commuter students, faculty and staff using zip code data of those users provided by the University. The average trip lengths for on-campus students were estimated from Riverside Transportation Analysis Model (RivTAM) model runs by extracting trip length data from the output skim matrices. Model skim matrices track origin and destination trip length data for each traffic analysis zone (TAZ) in the model by trip type. The home-based other production trip purpose was used to estimate the average trip length of on-campus students. The existing and future FTE and associated average trip lengths, daily trips generated, and estimated VMT is summarized in Table 9. As illustrated, the resulting VMT estimates show that the VMT, due to the increase in enrollment, is forecast to increase by 324,515 miles on a daily basis. However, due to the increase in the ratio of on-campus students, the VMT at the Master Plan buildout is projected to decrease on a per person basis. The Office of Research and Planning (OPR) has not yet issued thresholds for determining significance of daily VMTs.

Table 9. Daily VMT Estimates

User Type	FTE	Daily Trips	Average Trip Length (miles)	Daily VMT Estimate
Existing Enrollment				
Off-Campus Student	987	2,043	22.5	45,912
Faculty/Staff	99	181	17.8	3,215
			Total VMT	***49,127***
			VMT per FTE	***45.24***
Master Plan Enrollment				
On-Campus Student	616	1,207	3.4	4,104
Off-Campus Student	7,384	15,285	22.5	343,499
Faculty/Staff	801	1,466	17.8	26,039
			Total VMT	***373,643***
			VMT per FTE	***42.45***

Notes:
[1] Average trip length for on-campus students were estimated from RivTAM. Average trip length for off-campus students and faculty and staff were estimated from available zip code data from CSUSB enrollment. Average trip length was estimated to more significant digits than shown in the table and the values above have been rounded. As such, the daily VMT estimates were calculated with more precise data than summarized in this table.

Pedestrian, Bicycle and Transit Facilities

The addition of traffic and redistribution of vehicle traffic associated with the planned parking facilities on campus is not expected to cause any pedestrian, bicycle or transit impacts. The Master Plan provides for two Class II bike paths adjacent to the campus on Cook Street and Gerald Ford Drive. The Master Plan also considers expanding the shuttle service to the campus, which would improve transit accessibility in the area. The Master Plan also provides for expanded pedestrian facilities on campus that will improve walkability and connectivity. The Master Plan project does not disrupt any existing or planned bicycle, pedestrian, or transit facilities; nor does the project conflict with any plans, guidelines, policies, or standards related to the aforementioned modes.

Mitigation Measures

Intersection

Cook Street & University Park Drive/Berger Drive

A fair-share contribution will be made to the City of Palm Desert toward the following improvement at the time conditions warrant the improvement.

- Optimize signal timing to accommodate the increased traffic flow

With this improvement, the operations at the intersection will improve to LOS C in the AM peak hour, and the impact will be reduced to a less than significant level.

I-10 Freeway

To mitigate the identified significant impacts to the freeway mainline segments would require a complete reconstruction of the I-10 freeway to add travel lanes and upgrade the deficient ramp locations. Since the freeways in the study area are interconnected systems, it would not be possible, nor effective, to provide isolated spot improvements of one segment of the freeway where deficient operations are observed.

An additional mixed-flow travel lane has been proposed in both directions along I-10 between Monterey Avenue and Dillon Road according to the 2012 SCAG Regional Transportation Plan (RTP), but is no longer proposed under the 2016 SCAG RTP. These lanes would improve traffic conditions along the corridor, but according to Caltrans methodology and impact thresholds the corridor operations would continue to be deficient. As such, this impact is considered to be significant and unavoidable.

Level of Impact After Mitigation

Implementation of identified mitigation measures will reduce the impacts at the affected intersection to a less than significant level. Impact on I-10 freeway will be significant and unavoidable since to mitigate the impact would require a complete reconstruction of the freeway.

3.5 Air Quality and Greenhouse Gases (GHG)

This section examines the potential long-term air quality impacts, including greenhouse gases (GHG), associated with the 2016 CSU San Bernardino, Palm Desert Campus Master Plan project. Short-term impacts from construction of the project are discussed in Section 3.9, Construction Effects.

Environmental Setting

The Palm Desert campus is located within the South Coast Air Basin. The portion of the Basin where the campus is located continues to exceed Federal and State ambient air quality standards for ozone (O_3), and State standards for particulate matter (PM_{10}).

Air Pollution Control Efforts

Both the federal and State governments have set health-based ambient air quality standards for the following 6 pollutants:

- Sulfur dioxide (SO_2)
- Lead (Pb)
- Carbon monoxide (CO)
- Particulate Matter
    - Respirable particulate matter (PM_{10})
    - Fine particulate matter ($PM_{2.5}$)
- Nitrogen dioxide (NO_2)
- Ozone (O_3)

Standards for these pollutants have been designed to protect the most sensitive persons from illness or discomfort with a margin of safety. The California standards are more stringent than federal standards, especially in the case of PM_{10} and SO_2.

Table 10 outlines current federal and State ambient air quality standards, and sources and the health effects of these pollutants. Additional information about health effects associated with each pollutant is provided in the South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook, which is hereby incorporated by reference.

Table 10. Air Pollution Standards, Sources, and Effects

Air Pollutant	State Standards	National Standards (Primary)	Sources	Health Effect
Ozone (O_3)	0.07 ppm, 8-hr. avg. 0.09 ppm, 1-hr. avg.	0.070 ppm, 8-hr. avg.	Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	Aggravation of respiratory and cardiovascular diseases, irritation of eyes, impairment of cardiopulmonary function, plant leaf injury.
Respirable Particulate Matter (PM_{10})	50 μg/m^3, 24-hr. avg. 20 μg/m^3, AAM	150 μg/m^3, 24-hr. avg.	Stationary combustion of solid fuels, construction activities, industrial processes, industrial chemical reactions.	Reduced lung function, aggravation of the effects of gaseous pollutants, aggravation of respiratory and cardio-respiratory diseases, increased coughing and chest discomfort, soiling, reduced visibility.
Particulate Matter less than 2.5 Microns in Diameter ($PM_{2.5}$)	12 μg/m^3, AAM	35 μg/m^3, 24-hr. avg. 12 μg/m^3, AAM	Combustion from mobile and stationary sources, atmospheric chemical reactions.	Health problems, including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing, and premature deaths.
Carbon Monoxide (CO)	9.0 ppm, 8-hr. avg. 20 ppm, 1-hr. avg.	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.	Incomplete combustion of fuels and other carbon-containing substances such as motor vehicle exhaust, natural events, such as decomposition of organic matter.	Reduced tolerance for exercise, impairment of mental function, impairment of fetal development, death at high levels of exposure, aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	0.18 ppm, 1-hr. avg. 0.03 ppm, AAM	0.10 ppm, 1-hr. avg. 0.053 ppm, AAM	Motor vehicle exhaust, high-temperature stationary combustion, atmospheric reactions.	Aggravation of respiratory illness, reduced visibility, reduced plant growth, formation of acid rain.
Sulfur Dioxide (SO_2)	0.04 ppm, 24-hr avg. 0.25 ppm 1-hr. avg.	0.03 ppm, AAM 0.14 ppm, 24-hr. avg. 75 ppb, 1-hr. avg.	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, industrial processes.	Aggravation of respiratory diseases (asthma, emphysema), reduced lung function, irritation of eyes, reduced visibility, plant injury, deterioration of metals, textiles, leather, finishes, coating, etc.
Lead (Pb)	1.5 μg/m^3, 30 day avg.	0.15 μg/m^3, calendar quarter	Contaminated soil.	Increased body burden, impairment of blood formation and nerve conduction.
Visibility-Reducing Particles	Extinction coefficient of 0.23 per km, visibility of 10 miles or more due to particles when relative humidity is less than 70%..	No Federal Standards		Visibility impairment on days when relative humidity is less than 70%.

Notes:
ppm = parts per million by volume μg/m^3 = micrograms per cubic meter
AAM = annual arithmetic mean
Source: California Air Resources Board, https://www.arb.ca.gov/research/aaqs/aaqs2.pdf

Monitored Air Quality

The SCAQMD monitors air quality throughout the Basin at various locations. The Indio monitoring station located at 46990 Jackson Street, is the closest station to the campus. The number of days that State and/or federal ambient air quality standards for ozone and particulate matter were exceeded at this location are shown in Table 11.

Table 11. Federal and State Ozone and Particulate Matter Exceedances at Indio Monitoring Station

Year	Ozone (O_3)			Suspended Particulates (PM_{10})		Fine Particulates ($PM_{2.5}$)	
	Days Federal 8-hour Standard Exceeded	Days State 8-hour Standard Exceeded	Days State 1-Hour Standard Exceeded	% of Samples Exceeding Federal 24-hour Standard	% of Samples Exceeding State 24-hour Standard	% of Samples Exceeding Federal Standard	% of Samples Exceeding State Standard
2010	19	47	7	0	5	0	0
2011	19	42	3	0	3	0	0
2012	24	43	2	0	6	0	0
2013	18	38	2	0	19	0	0
2014	10	30	2	0	20	0	0
2015	11	12	0	0	13	0	0
2016	27	29	3	0	18	0	0

Note: ppm = parts per million parts of air, by volume
ppb = parts per billion
Source: http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year
Data for 2010-2016 from Station No. 4157.

Impact Criteria

The SCAQMD has established thresholds for certain criteria pollutants for projects within the South Coast Air Basin. SCAQMD considers projects in the South Coast Air Basin that exceed any of these emission thresholds to have a significant air quality impact. Thresholds for operation-related emissions are shown in Table 12.

Table 12. SCAQMD Long Term Operational Thresholds

Criteria Pollutant	Pounds per Day
Reactive Organic Gases (ROG)	55
Oxides of Nitrogen (NO_x)	55
Carbon Monoxide (CO)	550
Respirable Particulate Matter (PM_{10})	150
Fine Particulate Matter ($PM_{2.5}$)	55
Source: South Coast Air Quality Management District http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf	

Greenhouse Gases (GHG)

The SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" in 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy.

In 2008, the SCAQMD Governing Board adopted an interim greenhouse gas (GHG) significance threshold for stationary source/industrial projects where SCAQMD is the lead agency. However, SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects) but has formed a GHG Significance Threshold Working Group to further evaluate potential GHG significance thresholds[6] and provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups. The working group is currently discussing multiple methodologies for determining project significance. These methodologies include categorical exemptions, consistency with regional GHG budgets in approved plans, a numerical threshold, performance standards, and emissions offsets. Also, the State Office of Planning and Research (OPR) is currently finalizing a Technical Advisory to provide guidance on specific topics related to climate action planning and the use of plans for the reduction of greenhouse gases in a CEQA analysis.[7]

Environmental Impact

The Master Plan concentrates the planned campus within the approximately 85-acre campus area that addresses functional adjacencies between campus land uses, land suitability, and accessibility (pedestrian, vehicle, and bicycle) factors to accommodate future growth in student enrollment to 8,000 full-time equivalent (FTE) students. The Master Plan calls for the ultimate development of 8 to 10 new academic buildings to be placed within the core area along a new

[6] South Coast Air Quality Management District, Greenhouse Gases CEQA Significance Thresholds (http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds)
[7] The Governor's Office of Planning & Research, CEQA and Climate Change (https://www.opr.ca.gov/s_ceqaandclimatechange.php)

pedestrian promenade to create a denser, walkable campus. The Master Plan provides for new student housing facilities with approximately 616 beds, associated dining and support facilities, new and upgraded academic, administrative, support facilities, new athletic fields and facilities, and infrastructure improvements within the campus area (See Section 2.0 Project Description)

The long-term operational emissions associated with the Master Plan are summarized in Table 13. A "worst-case" scenario is used to analyze these long-term air quality impacts. Area ROG and NOx emissions were calculated for both winter and summer with the higher emissions reported, and GHG emissions were calculated on an annual basis, using the CalEEMod model Version 2016.3.1.

Table 13. Project Operational Emissions, Year 2035

	Reactive Organic Gases (ROG)	**Oxides of Nitrogen (NO_X)**	**Carbon Monoxide (CO)**	**Respirable Particulate Matter (PM_{10})**	**Fine Particulate Matter ($PM_{2.5}$)**	**GHG (CO_{2e}) Tons/year**
Area Sources	33	<1	1	<1	<1	-
Energy	<1	5	4	<1	<1	-
Vehicular Emissions	13	111	107	55	15	-
Total	47	115	112	55	15	14,460
SCAQMD Threshold	55	55	550	150	55	-
Exceeds Threshold?	**No**	**Yes**	**No**	**No**	**No**	-

Source: CalEEMod, Version 2016.3.1
Note: Total emissions shown are based on sum of individual emission sources prior to rounding.

As shown, the pollutant emissions will exceed the SCAQMD daily threshold amount for NO_X, primarily due to vehicular traffic associated with accommodating 8,000 FTE student enrollment on campus.

Consistency with Regional Air Quality Plans

The SCAQMD suggests that the EIR discuss a project's consistency with the current regional Air Quality Management Plan (AQMP) and other regional plans. The purpose of this discussion is to determine if the project is consistent with assumptions and objectives of the regional AQMP, and thus, would not interfere with the region's ability to comply with federal and State air quality standards.

A project is considered to comply with the AQMP if it is consistent with the growth assumptions of the AQMP. The SCAQMD 2016 AQMP assumes development throughout the region will occur as outlined in the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The Master Plan

provides for continuing use of the campus for educational purposes to accommodate planned future area-wide growth in student population. The Master Plan will significantly increase student housing on campus, which will work to reduce student commuter trips on the existing roadway networks. The Master Plan is consistent with SCAG's growth projections and land use policies, including policies focusing on strategic transportation investments with more bicycle and pedestrian options, pedestrian-oriented development, and encouraging sustainable development that contributes to reducing adverse air quality and GHG impacts.

The University implements, and will continue to implement pursuant to the Master Plan, numerous programs and policies to improve air quality in the region. This includes providing student housing, complete with dining facilities which will reduce commute trips and the associated air pollutant emissions, and minimizing energy use through project design, increased efficiencies equivalent to the LEED gold standard in new facilities, and use of renewable energy sources. Therefore, the Master Plan is both supportive of the AQMP goals and objectives and consistent with the AQMP.

However, since the emissions of NOx could exceed the SCAQMD daily threshold amounts, impact is considered to be significant.

Mitigation Measures

The University will implement numerous programs and policies to improve air quality in the region pursuant to the Master Plan, including providing housing for students on campus that will reduce commute trips and the associated air pollutant and GHG emissions, minimizing energy use through project design and increased use of renewable energy sources, and improving walkability design and pedestrian network on campus. In addition, the following measures will be implemented:

1. Consider use of electric leaf blowers.

2. Consider providing the appropriate infrastructure to facilitate sufficient electric charging for vehicles to plug-in by installing 240-Volt electrical outlets or Level 2 chargers in parking lots enabling charging of NEVs and/or battery powered vehicles.

Level of Impact After Mitigation

The Master Plan's comprehensive sustainability programs and features guiding the future development of the campus which are needed to accommodate the area-wide student population growth and incorporation of the identified mitigation measures will reduce emissions to the extent feasible. However, since emissions of NOx could exceed the SCAQMD threshold amount, this impact is considered significant and unavoidable.

3.6 Noise

This section evaluates long-term noise impacts associated with the 2016 Master Plan for the CSU San Bernardino Palm Desert campus (the project). Short-term noise impact from construction of individual facilities pursuant to the Master Plan is evaluated in Section 3.9, Construction Effects, of this EIR.

Environmental Setting

Sound levels are expressed on a logarithmic scale of decibels (abbreviated as dB), in which a change of 10 units on the decibel scale reflects a 10-fold increase in sound energy. A 10-fold increase in sound energy roughly translates to a doubling of perceived loudness.

In evaluating human response to noise, acousticians compensate for people's response to varying frequency or pitch components of sound. The human ear is most sensitive to sounds in the middle frequency range used for human speech, and is less sensitive to lower and higher-pitched sounds. The "A" weighting scale is used to account for this sensitivity. Thus, most community noise standards are expressed in decibels on the "A"-weighted scale, abbreviated dB(A). Zero on the decibel scale is set roughly at the threshold of human hearing. Common sounds in the environment include office background noise at about 50 dB(A); human speech at 10 feet at about 60 to 70 dB(A); cars driving by at 50 feet at 65 to 70 dB(A); trucks at 50 feet at 75 to 80 dB(A); and aircraft overflights directly overhead a mile from the runway at about 95 to 100 dB(A).

The community noise environment consists of wide varieties of sounds, some near and some far away, which vary over the 24-hour day. People respond to the 24-hour variation in noise but are most sensitive to noise at night. California standards for community noise use the Community Noise Equivalent Level (CNEL), in which a 5-decibel penalty is added to the evening 7:00 PM to 10:00 PM period, and a 10-decibel penalty to the night 10:00 PM to 7:00 AM period.

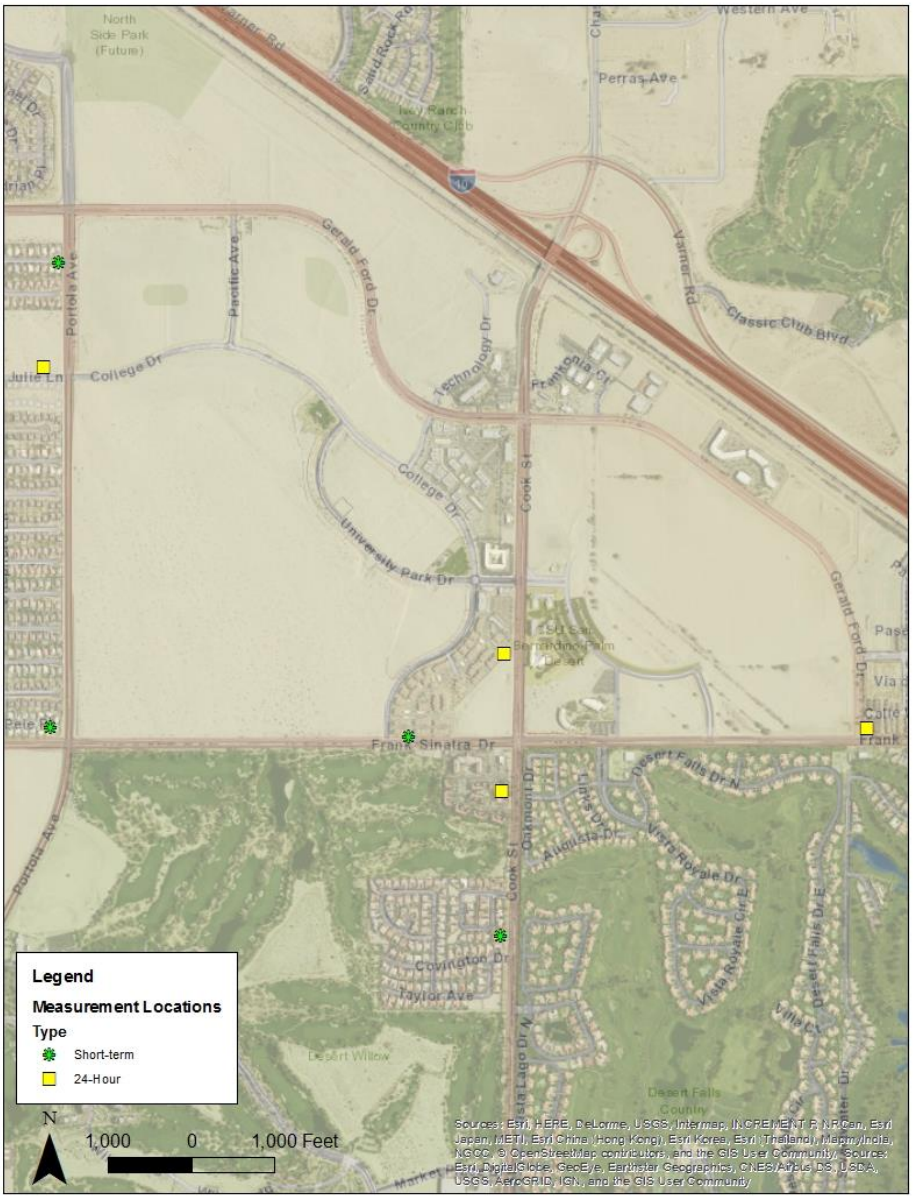
Noise-Sensitive Uses

Some land uses are considered more sensitive to noise than others. Noise-sensitive land uses include homes, schools, day care facilities, hospitals, and similar uses. Commercial and industrial uses are generally not considered noise sensitive because people do not rest or sleep there. The Palm Desert campus is bordered and separated from the existing development by Gerald Ford Drive, Cook Street on the west, and Frank Sinatra Drive on the south.

Existing Noise Levels

Traffic on local streets is the major source of noise in the study area. Four 24-hour noise measurements and four 15-minute measurements were taken in the project vicinity to ascertain the existing noise levels (see Figure 18).

Figure 18
Noise Measurement Locations



There are two main access routes to the campus, University Park Drive/Berger Drive West and Berger Drive South. These two access routes are connected by two other major roadways, Cook Street and Frank Sinatra Drive. The results of noise measurements along these roadways indicate that in the existing noise levels in the project vicinity range from 60.9 to 65.8 dB(A), as summarized in Table 14.

Table 14. Existing Noise Levels

Roadway	Cross Streets	Existing Ldn, dBA
Portola Avenue	Gerald Ford Drive to Frank Sinatra Drive	61.8
Frank Sinatra Drive	Portola Ave to Cook Street	65.8
Frank Sinatra Drive	Cook Street to Gerald Ford Drive	62.1
Cook Street	Gerald Ford Drive to Frank Sinatra Drive	64.1
Cook Street	Frank Sinatra Drive to County Club Drive	60.9
Gerald Ford Drive	Cook Street to Frank Sinatra Drive	62.1

Note: Ldn is a 24-hour average noise level with 10 decibel penalty added to the night period from 10:00 p.m. to 7:00 a.m.

Impact Criteria

The City of Palm Desert Noise Control (Section 9.24 of the Municipal Code) does not specifics acceptable noise levels for residential properties. Palm Desert Noise Control does give applicable ten-minute average decibel limits for a fixed noise sources for residential zones, but these levels do not apply to traffic noise level.

While the City does not have specific noise impact criteria, the Federal Interagency Committee on Noise (FICON) established significance criteria for noise impacts using a sliding scale based on the existing Ldn noise levels, where Ldn is a 24-hour average noise level with 10 decibel penalty added to the night period from 10:00 p.m. to 7:00 a.m. These noise impact criteria, considered applicable to all noise sources that use the Ldn or CNEL noise exposure metrics and used in the analysis, are shown in Table 15.

Table 15. Noise Significance Criteria

Existing Ldn	Significant Impact
Below 60 dBA	+5.0 dBA or more
60 - 65 dBA	+3.0 dBA or more
Above 65 dBA	+1.5 dBA or more

Source: Federal Government's Method of Assessing Noise Impacts. July 14, 2000.

Environmental Impact

Traffic Noise

Based on data in the traffic study prepared for the Master Plan, analyses were conducted to identify the future traffic noise levels with and without the project. Future traffic noise levels and the contribution of the project-generated traffic to these future noise levels were calculated for 6 study street segments. The results of the analysis illustrating the changes in noise levels due to the project and cumulative future growth within the area are summarized in Table 16.

Table 16. Change in Noise Levels

Roadway	Cross Streets	Existing Ldn, dBA	Future Ldn, dBA (Project)	Future Ldn, dBA (Cumulative)	Change in Ldn, dBA (Project)	Change in Ldn, dBA (Cumulative)	Significant Impact?
Portola Avenue	Gerald Ford Drive to Frank Sinatra Drive	61.8	61.8	63.5	0.0	1.7	No
Frank Sinatra Drive	Portola Ave to Cook Street	65.8	66.6	67.3	0.8	1.5	Yes
Frank Sinatra Drive	Cook Street to Gerald Ford Drive	62.1	65.8	67.0	3.7	4.9	Yes
Cook Street	Gerald Ford Drive to Frank Sinatra Drive	64.1	65.3	64.5	1.2	0.4	No
Cook Street	Frank Sinatra Drive to County Club Drive	60.9	61.3	60.8	0.4	-0.1	No
Gerald Ford Drive	Cook Street to Frank Sinatra Drive	62.1	62.1	63.6	0.0	1.5	No

Note: Ldn is a 24-hour average noise level with 10 decibel penalty added to the night period from 10:00 p.m. to 7:00 a.m.

As shown, the noise level at the study roadway segment along Portola Avenue, between Gerald Ford Drive and Frank Sinatra Drive, is projected to increase from 61.8 dBA to 63.5 dBA as a result of future growth. The project is not projected to contribute to the increase in overall noise levels at this segment, therefore, the project will not result in an adverse impact at this study segment. Based on the significance criteria, cumulative impact is not projected to be significant for this study segment.

There are two study roadway segments along Frank Sinatra Drive. Based on the analysis, noise levels between Portola Avenue to Cook Street are projected to increase from 65.8 dBA to 67.3 dBA as a result of future growth. The project's contribution to the increase of noise level is 0.8 dBA. The noise levels between Cook Street and Gerald Ford Drive are projected to increase from 62.1 dBA to 67.0 dBA as a result of future growth. The project's contribution to the increase of noise level is 3.7 dBA. Based on the significance criteria the cumulative impact at Portola Avenue to Cook Street is projected to be significant, and the increase in noise levels at Cook

Street to Gerald Ford Drive will result in both a project-related and cumulative significant impact.

There are two study roadway segments along Cook Street. Based on the analysis, Cook Street noise levels are projected to increase from 60.8 and 64.5 dBA as a result of future growth, including the project. The project's contribution to the increase in noise levels ranges from 0.4 to 1.2 dBA. Based on the significance criteria, the project-related and cumulative impact is not projected to be significant at these study roadway segments.

The noise level along Gerald Ford Drive, between Cook Street and Frank Sinatra Drive, is projected to be 63.6 dBA as a result of future growth, including the project. As the project is not projected to contribute to noise level along this segment, the project will not result in an adverse impact at this roadway segment.

Campus Activity Noise

The Master Plan provides for student housing facilities providing approximately 616 beds on campus in new residence halls concentrated within the campus core south of Berger Circle Drive West and east of Cook Street. Noise associated with day-to-day operations and student activity at these residence halls will not affect any sensitive off campus uses as the residence halls will be located at a considerable distance from the off-campus development and will be separated from the surrounding uses to the west by Cook Street. The Master Plan also provides for new playfields, including two soccer fields and a track/soccer field with bleachers near the Physical Education center; and two additional soccer fields, regulation size baseball and softball fields, and tennis courts in an area north of Berger Circle Drive. Noise associated with athletic programs and activities at these facilities will not affect any sensitive off campus uses as the playfields will be located within the northeastern portion of the campus, away from the closest off campus residential neighborhoods located south and southeast of campus. In addition, these neighborhoods are separated from the campus and the planned athletic fields by the campus' undeveloped land, which forms a buffer between the campus and the off-campus development, and by a major arterial street, Frank Sinatra Drive. Therefore, the campus activity noise will not be a significant impact.

Mitigation Measures

No direct feasible mitigation measures are available to reduce the project-related traffic noise impact. As most of the residential areas already have 6 to 8-foot noise barriers in place to help reduce traffic noise, additional noise attenuation is not required.

Level of Impact After Mitigation

The project-related and cumulative traffic noise impact along Frank Sinatra Drive, from Portola Avenue to Cook Street and from Cook Street to Gerald Ford Drive, will remain significant and unavoidable.

3.7 Fire and Police Protection Services

Environmental Setting

Fire protection for CSU San Bernardino, Palm Desert campus is provided by the Riverside County Fire Department, in cooperation with the California Department of Forestry and Fire Protection (Cal Fire). Police protection is provided by the Palm Desert Police Department, which is served under contract by the Riverside County Sheriff's Department (RCSD).

Fire Protection

The existing campus facilities are equipped with smoke detectors and fire alarms which are set to provide both visual and audio alarms in the event a fire is detected or a fire alarm pull station is activated. Standard operating procedures are identified and disseminated on a regular basis to faculty, staff, and students to address a variety of different fire scenarios that may occur on campus. If a fire situation is identified, campus administrative staff and RCSD will institute an emergency response and contact the Riverside County Fire Department.

All fire equipment at the campus is maintained in accordance with State and local regulations. Fire equipment is inspected on a regular schedule and re-charged, repaired, or replaced as needed. The University holds two fire drills per complex per year (fall and winter) which requires the complete evacuation of all campus buildings. All student staff are trained in fire drill and alarm protocol.

Riverside County Fire Department

The Riverside County Fire Department, in cooperation with Cal Fire, provides fire and emergency services to residents of unincorporated areas of Riverside County and other partner cities. The Riverside County Fire Department operates 101 fire stations.[8]

Fire Station No. 71 (North Palm Desert Station) is located approximately 3 miles to the southwest of campus, at 73995 Country Club Drive, providing service to campus with minimal response time. Other stations in the vicinity include Fire Station Nos. 69 (North Rancho Mirage Station) and 81 (North Bermuda Dunes Station), both within 5 miles of campus. In addition, the City is planning to construct a new fire station adjacent to the Palm Desert campus to provide additional fire protection coverage for development in the vicinity, including the campus.[9]

[8] Riverside County Fire Department (http://www.rvcfire.org/stationsandfunctions/firestations/Pages/default.aspx)
[9] City of Palm Desert General Plan, Police and Fire Protection Element, 2004

Police Protection

The Palm Desert Police Department, served under RCSD, has primary policing responsibilities for the Palm Desert campus. The RCSD has a staff of over 4,000 employees, providing core services including, but not limited to: first response, police services, search and rescue, emergency response, mutual aid coordination, enforcement of criminal law on tribal lands, operating and maintaining jail system, and court services.[10] The Palm Desert Station is located approximately two miles northwest of the campus, at 73705 Gerald Ford Drive.

Impact Criteria

Impact on police and/or fire protection services will be significant if the project will require construction of new facilities or expansion of existing facilities, the construction of which would result in significant adverse effects, in order to maintain acceptable service ratios, response times, and other performance objectives.

Environmental Impact

Fire Protection

Implementation of the Master Plan will result in an incremental increase in demand for fire prevention and suppression services. The University will continue to implement fire safety training and response procedures to facilitate fire suppression. New buildings and other facilities will continue to include all necessary ingress and egress for traffic circulation and emergency response, and will comply with all applicable requirements for construction, access, water mains, fire flows, and life safety requirements. All fire equipment at the campus will continue to be maintained in accordance with State and local regulations. If a fire situation is identified, campus administrative staff and RCSD will continue to institute an emergency response and contact the Riverside County Fire Department and, similar to CSU San Bernardino main campus, when the new student housings is constructed and in operation, resident assistants will hold quarterly hall meetings and multiple programs to inform students of evacuation procedures and address fire safety.[11] In addition, the City of Palm Desert currently plans to construct a new fire station adjacent to the campus to provide additional fire protection coverage for the foreseeable development in the vicinity, including the Palm Desert campus.[12]

While the Master Plan includes new facilities, thus contributing to an incremental increase in demand, the existing fire stations in close proximity to the campus and the future station adjacent to the campus will satisfy the increased demand. Enhanced operating procedures, incorporation of required fire suppression and safety features, the continued emergency response training and

[10] Riverside County Sheriff's Department (http://www.riversidesheriff.org/department/)
[11] *CSUSB Annual Fire Safety Report 2016* (https://www.csusb.edu/sites/default/files/FireSafetyReport_CSUSB.pdf)
[12] City of Palm Desert General Plan, Police and Fire Protection Element, 2004

the construction of a new fire station adjacent to the campus will provide additional fire protection coverage and will help minimize increased demand for services therefore, impact is considered to be less than significant.

Police Protection

The gradual growth in student enrollment on campus will result in an incremental increase in demand for police protection services. This increase in demand will be minimized through provision of a new University Police and Transportation Office on campus pursuant to the Master Plan, the implementation of new enhanced operating procedures, continued campus safety training, and appropriate staffing of the University Police. All new campus facilities, including access and internal site circulation plans, will be reviewed with regards to security objectives and police mobilization purposes to ensure adequate ingress/egress for emergency vehicles. New buildings and other facilities will be incorporated into the University's security and emergency response plans to ensure appropriate access for police and emergency response. New campus facilities may include passive and/or active security systems, and/or other measures, to minimize the need for new security personnel. Therefore, impact is considered to be less than significant.

Mitigation Measures

Impact will be less than significant and no mitigation beyond continued compliance with all applicable existing regulations, requirements, and procedures is required.

Level of Impact After Mitigation

Impact will be less than significant and no mitigation beyond continued compliance with all applicable existing regulations, requirements, and procedures is required.

3.8 Utilities and Service Systems

This section addresses the impact of the CSU San Bernardino, Palm Desert Campus 2016 Master Plan on public utility infrastructure and services. Much of the information presented in this section is derived from the Utility Infrastructure Master Plan[13].

Environmental Setting

Water

Water service is provided to the CSUSB Palm Desert campus by the Coachella Valley Water District (CVWD). Groundwater is the principal source of municipal water in the Coachella Valley. CVWD obtains groundwater from both Whitewater River and the Mission Creek subbasins. As of 2016, the campus water use was approximately 15 acre-feet per year (AFY).

Sewer

The Coachella Valley Water District provides wastewater collection and treatment services to the City of Palm Desert. Wastewater is conveyed through sewer trunk lines generally ranging in size from 4 to 24 inches. Effluent from the City is conveyed to CVWD's Cook Street treatment plan (Water Reclamation Plant No. 10), which has a current capacity of 18 million gallons per day.[14] The sanitary sewer system on campus is comprised of connections to main sewer lines located south of Berger Circle Drive. The sanitary sewer system primarily operates or drains by gravity, and drains south through a network of 8" and 12" pipes and manholes.

Stormwater Drainage

The Coachella Valley Water District (CVWD) provides stormwater management and flood control to the area.[15] The campus storm drain system comprises a network of storm drain pipes in the central portions of campus that conveys stormwater to the south side of the campus.[16]

Solid Waste

The solid waste services for the campus are provided by the City of Palm Desert. The landfills that currently accept waste generated within the County of Riverside are: Badlands Landfill (33-AA-0006), Lamb Canyon Landfill (33-AA-0007), and El Sobrante Landfill (33-AA-0217)[17]. Waste is collected on campus for recycling, reuse, and/or disposal. As of 2015, 143 tons of solid

[13] CSU San Bernardino - Palm Desert Campus Utilities Master Plan, P2S Engineering, Inc. January 2017
[14] City of Palm Desert General Plan, Water, Sewer, & Utilities Element, 2004
[15] 2015 Urban Water Management Plan, Coachella Valley Water District.
[16] CSU San Bernardino - Palm Desert Campus Utilities Master Plan, P2S Engineering, Inc. January 2017
[17] City of Palm Desert General Plan, Water, Sewer and Utilities Element, 2004

waste was generated on campus. Out of this total amount, 56 tons of waste was disposed[18], resulting in a campus-wide diversion of 87 tons, or approximately 61%. With the on-going campus-wide waste management diversion program that includes waste diversion and recycling efforts, the waste diversion number is expected to continue to grow.

Impact Criteria

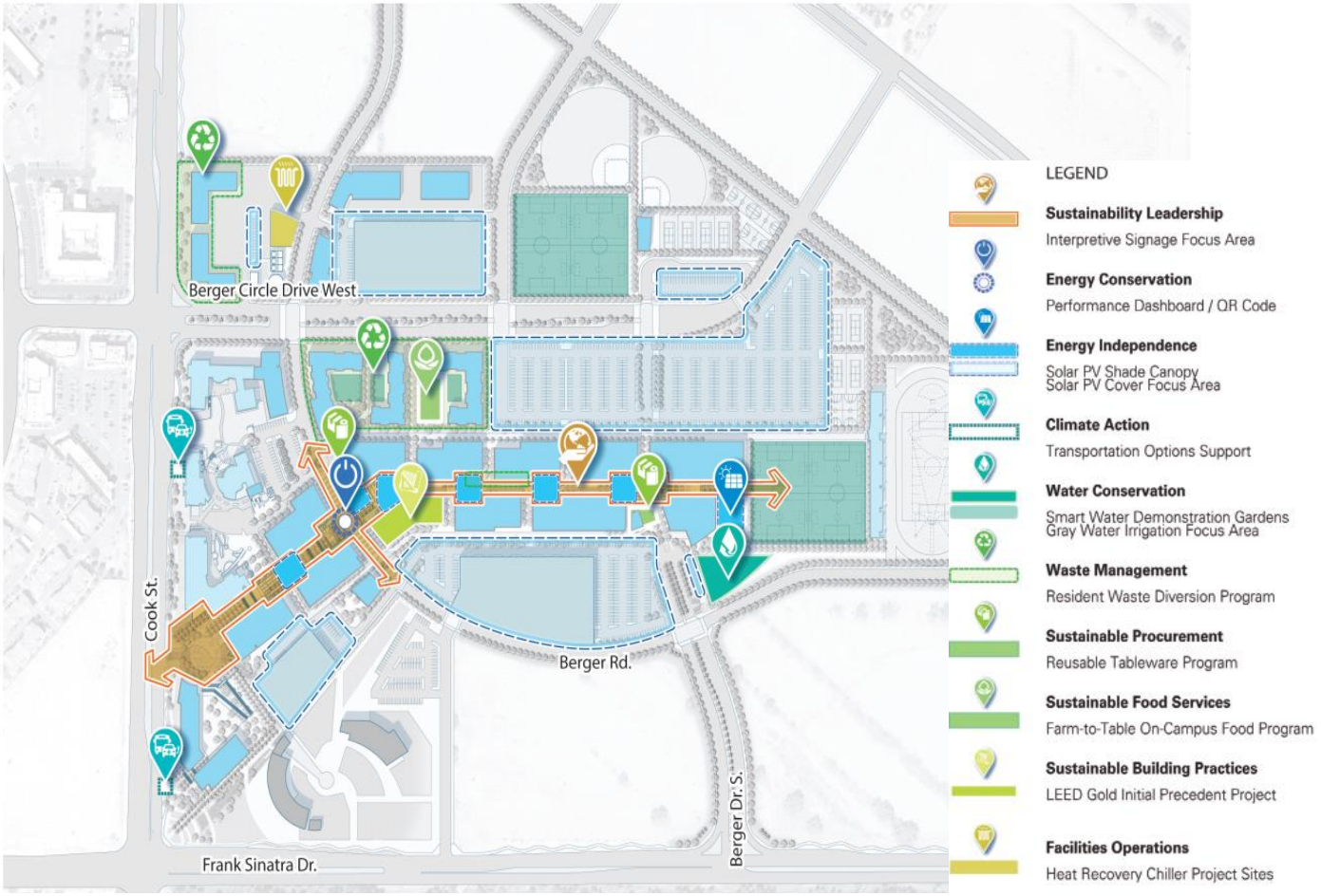
Impact on public utility services will be significant if the project will exceed the utility's capacity to provide services and/or will require construction of new facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

Environmental Impact

Comprehensive sustainability guidelines and features are an essential part of the Master Plan. The Master Plan aims at creating a sustainable campus that conserves water, and reduces generation of wastewater, stormwater, and solid waste. Major sustainability features of the Master Plan are illustrated in Figure 19.

[18] CSUSB, 2015

Figure 19
Campus-Wide Sustainability Framework



Source: 2016 Campus Master Plan

Water

As previously discussed, the campus water supply is provided by the Coachella Valley Water District (CVWD). Tables 17 and 18 provide CVWD's projected water supplies and demand for an average normal year and multiple dry years[19].

Table 17. Normal Year Supply and Demand Comparison

Urban Only – Acre Feet (AF)					
	2020	**2025**	**2030**	**2035**	**2040**
Supply	114,600	136,100	157,700	178,900	194,300
Demand	114,600	136,100	157,700	178,900	194,300
Difference	0	0	0	0	0

Source: 2015 Urban Water Management Plan, Coachella Valley Water District, Table 7-6

Table 18. Multiple Dry Year Supply and Demand Comparison

Urban Only – Acre Feet (AF)						
		2020	**2025**	**2030**	**2035**	**2040**
First year	Supply	114,600	136,100	157,700	178,900	194,300
	Demand	114,600	136,100	157,700	178,900	194,300
	Difference	0	0	0	0	0
Second year	Supply	114,600	136,100	157,700	178,900	194,300
	Demand	114,600	136,100	157,700	178,900	194,300
	Difference	0	0	0	0	0
Third year	Supply	114,600	136,100	157,700	178,900	194,300
	Demand	114,600	136,100	157,700	178,900	194,300
	Difference	0	0	0	0	0

Source: 2015 Urban Water Management Plan, Coachella Valley Water District, Table 7-8

A Water Supply Assessment (WSA) was prepared for the Campus Master Plan in August 2017 by Terra Nova Planning & Research, Inc. The WSA findings are summarized below, and the WSA is included in Appendix E of this EIR.

The campus water demand was estimated based on indoor water use performance standards as provided in the California Water Code for residential water demand; the American Water Works Association Research Foundation; and the District's Ordinance No. 1302.1 Act of 2006 (in accordance with AB 1881 – Water Conservation in Landscaping) that meets the water conservation goals of the Department of Water Resources (DWR) Model Water Efficient Landscape Ordinance (MWELO), which is the methodology used by CVWD. The total water demand for the Campus Master Plan is estimated to be 330 acre feet per year (AFY) based on calculations using this CVWD method, as summarized in Table 19.

[19] 2015 Urban Water Management Plan, Coachella Valley Water District.

Table 19. Water Demand Estimate

	Land Use	Unit	GPD/Unit	Max Units	Demand (GPD)	Annual Demand (AFY)
CVWD Water Demand Estimates	Residential Hall	Beds	55.00	616	33,880	38
	Academic*	SF	0.19	1,103,000	214,700	241
	Landscaping	---	---	---	---	51
					Total	**330**

Note: * Demand factor based on American Water Works Association Research Foundation (AWWARF) for "new office building" which assumes similar hours of operations and daily uses.
GPD = gallons per day

The CVWD 2015 Urban Water Management Plan provides projections of future water supply and demand within the District's service area. As shown in Table 20, the estimated Campus Master Plan water use represents only 0.17%, or less than two-tenths of one percent of CVWD's total projected urban water year 2040 supply during a normal year and multiple dry years.

Table 20. Project Demand on Ground Water Supply, Year 2040*

Total Water Supply	194,300 AF
Project Demand**	330 AF
Percent of Supply	0.17%

* Year 2035 is the projected final buildout year for the CSUSB Palm Desert Campus Master Plan and completion of the project.
** Project demand based on calculations using the CVWD method.

The CVWD approved the WSA on September 26, 2017 and determined that there will be sufficient water supplies to meet the project demand, as well as the demand of other future development within the CVWD service area. Therefore, impact will be less than significant.

Furthermore, the Master Plan's Water Sustainability component includes a wide range of water conservation programs and measures, with high water efficiency in indoor building design and in landscape design. Water saving strategies include using no potable water for non-potable uses, using recycled and reclaimed water for irrigation (on drought tolerant landscaping), and using high water conserving plumbing fixtures.

Pursuant to the Master Plan, the existing water infrastructure on campus will be expanded and improved as necessary to serve the new facilities developed. The Master Plan provides for an integrated water system approach that can be implemented over time which will provide water conservation designs, features, and sustainable water management to help conserve water and plan for a "future ready" campus at every phase of development. Therefore, the project's implementation of water conservation designs, features, and measures and payment of all legally required capital facilities fees pursuant to and in compliance with the California Government

Code Section 54999, including connection fees and user fees, will mitigate any potential impact on the regional water system and infrastructure to a less than significant level.

Sewer

Wastewater generated by the campus is treated at a Water Reclamation Plant located in Riverside County. Assuming 95% of potable water used becoming wastewater, the future student enrollment of 8,000 FTE and campus development pursuant to the Master Plan will generate approximately 236,151 gallons of wastewater per day. The campus wastewater generation represents less than 0.7% (seven-tenths of one percent) of CVWD's current total capacity of 34,000,000 gallons per day.[20]

Furthermore, the Master Plan's Campus Sustainability chapter includes a wide range of water conservation programs and measures, including high water efficiency in indoor building design and in landscape design, which will reduce generation of wastewater.

The Utility Master Plan includes plans for new sewerage infrastructure on campus to accommodate wastewater flows. To avoid potential conflicts with proposed new facilities, rerouted lines will be installed and new service laterals will be constructed to connect the new buildings to meet their sewer needs. Service laterals will be sized based on the function and size of the buildings planned pursuant to the Master Plan.

Therefore, implementation of the Master Plan's water conservation designs, features, and measures that reduce wastewater generation; and payment of all legally required capital facilities fees pursuant to and in compliance with the California Government Code Section 54999, including connection fees and user fees, will mitigate any potential impact on the regional sewer system and infrastructure to a less than significant level.

Stormwater Drainage

The existing storm drainage system for the campus will be augmented with new storm drain piping extensions constructed to connect the new buildings to meet their drainage needs. Service laterals will be sized based on the function and size of the proposed buildings planned pursuant to the Master Plan. Some of the existing storm drain lines will be relocated to accommodate the new buildings.

The Master Plan's Campus Sustainability chapter incorporates water strategies and plans to prioritize stormwater and help future-proof the campus from flash flood threats. Future campus development will be implemented with the sustainability guidelines and features which will result in the use of natural stormwater management strategies, including bioswales and infiltration, resulting in an overall reduction in the piped stormwater conveyance requirement to meet the demands of a 10-year storm event.[21]

[20] CVWD Development Design Manual, August 2015
[21] 2016 CSU San Bernardino Palm Desert Campus Master Plan

Furthermore, in compliance with existing requirements on-site structural or treatment control Best Management Practices (BMPs) will be included in all future campus development. The Master Plan Utility Infrastructure Report enumerates the BMPs with an aim to effectively prohibit non-storm water discharges and reduce discharge of pollutants from stormwater conveyance systems to the maximum extent practicable. Examples of the BMPs may include:[22]

- Effectively prohibit non-storm water discharges, and
- Reduce the discharge of pollutants from storm water conveyance systems to the maximum extent practicable.
- Provide reduced width sidewalks and incorporate a landscape buffer between sidewalks and streets.
- Design streets for minimum required pavement widths.
- Use permeable materials for sidewalks, driveways, parking lots, or interior roadway surfaces (e.g. hybrid lots, parking groves, permeable overflow parking, etc.).
- Use open space development that incorporates smaller lot sizes (e.g. multi-story construction)
- Use green roofs on top of buildings
- Reduce overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spillover parking areas.
- Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas and avoid routing rooftop runoff to the roadway or the storm water conveyance system.
- Vegetated swales (bioswales) and strips
- Extended/dry detention basins
- Infiltration basins
- Infiltration trenches
- Wet ponds
- Constructed wetlands
- Oil/water separators
- Catch basin and/or storm drain inserts
- Continuous flow deflection/separation systems
- Media filtration
- Bioretention facility
- Dry-wells
- Cisterns
- Foundation planting
- Normal flow storage/separation systems
- Clarifiers
- Filtration systems

Therefore, the implementation of the Master Plan's sustainable features and measures that reduce stormwater generation; and mandatory compliance with existing regulations that include payment of all legally required capital facilities fees pursuant to and in compliance with the California Government Code Section 54999, including connection fees and user fees, will

[22] CSU San Bernardino - Palm Desert Campus Utilities Master Plan, P2S Engineering, Inc. January 2017

mitigate any potential impact on the regional stormwater system and infrastructure to a less than significant level.

Solid Waste

The University's commitment to a campus-wide consolidated waste management program has resulted in diverting up to 61% of waste from landfills at the Palm Desert Campus through recycling and other waste diversion measures. The University's waste diversion program includes dedicated bins in high-generation areas, recovery of recyclable materials, contamination from liquid residues to recyclable paper products in the dry commingled recycling program, and redemption fund revenue to help maintain and grow waste management programs on campus. The bins are located in public areas and offices around campus, as well as special events.[23] The waste reduction is anticipated to continue to grow consistent with the State law of diverting at least 75%[24], and the California State University's goal of diverting 80% of waste by 2020[25].

The estimated project's solid waste generation is summarized in Table 21. As shown, the project will generate approximately 817 tons of solid waste per year. With a continuing increase in recycling and waste reduction, and the goal of 80% waste diversion, the amount of non-recyclable waste generated by the project is anticipated to be approximately 662 tons per year.

Table 21. Estimated Project Solid Waste Generation

Generation Rate	Size	Solid Waste Generated
0.12 ton/FTE student (with current 61% solid waste diversion)	8,000 FTE students	817
80% Solid Waste Diversion		155
Total		**662**

*FTE: Full Time Equivalent Student
Source: CSUSB

Two of the three existing landfills serving the campus are projected to be closed prior to the Master Plan buildout year of 2035. The Badlands Landfill has an estimated closure of year 2022, and the maximum permitted throughput is 4,800 tons per day. The Lamb Canyon Landfill has an estimated closure year of 2029, and the maximum permitted throughput is 5,500 tons per day. The El Sobrante Landfill has an estimated closure year of 2045, past the Master Plant buildout year of 2035, and the maximum permitted throughput is 16,054 tons per day. The total remaining capacity of all three landfills is approximately 150,000,000 tons.[26] The Master Plan's annual solid waste disposal represents only a small fraction, less than 0.0005% - of the landfills'

[23] CSU San Bernardino Facilities Services http://sustainability.csusb.edu/performance/BeverageRecycling.html
[24] Assembly Bill No. 75 and Assembly Bill No. 341
[25] The California State University, Sustainability Report 2014.
[26] http://www.calrecycle.ca.gov/SWFacilities/Directory

capacity. As the project will generate a relatively small amount of solid waste and includes implementation of comprehensive waste reduction and diversion programs in compliance with existing laws and requirements that will divert 80% of waste from landfills, this impact is considered less than significant.

Mitigation Measures

The Master Plan's sustainability guidelines will guide future campus development resulting in water conservation and reduced wastewater generation, effective management of stormwater flows and improved stormwater quality, and reduced generation of non-recyclable waste. With these features, compliance with existing requirements, and payment of all legally required capital facilities fees pursuant to and in compliance with the California Government Code Section 54999, impact on the regional public utilities system and infrastructure will be less than significant. No additional mitigation is required.

Level of Impact After Mitigation

The Master Plan's sustainability guidelines will guide future campus development resulting in water conservation and reduced wastewater generation, effective management of stormwater flows and improved stormwater quality, and reduced generation of non-recyclable waste. With these features, compliance with existing requirements, and payment of all legally required capital facilities fees pursuant to and in compliance with the California Government Code Section 54999, impact on the regional public utilities system and infrastructure will be less than significant. No additional mitigation is required.

3.9 Construction Effects

This section examines short-term effects associated with construction of buildings, facilities, and improvements on the campus pursuant to the Master Plan. Construction impact from each individual facility project is considered short-term as it will cease upon completion of construction activities. Due to the long-term comprehensive nature of the Master Plan, construction activities for specific facilities or improvements may overlap and/or result in continuous activities on-campus throughout the life of the Master Plan.

Environmental Setting

Generally, construction activities result in short-term noise, dust, air, and water pollution impacts, as well as increased truck and construction worker trips and localized traffic congestion. In most cases, general disturbance and annoyance is associated with construction affects uses in close proximity to the specific construction site. However, other construction impacts, such as those on air and water quality, can affect areas at great distances from a specific construction site. The existing campus facilities include academic, administrative, and support, facilities, and surface parking.

Sensitive Uses

The CSUSB Palm Desert campus is located within the Coachella Valley. The campus is currently developed with four buildings separated from the existing surrounding residential development to the south by the UC Riverside – Palm Desert Campus and Frank Sinatra Drive. Residential neighborhoods to the west are separated by Cook Street and multi-family housing to the east is separated from the campus by open space and Gerald Ford Drive. Commercial development to the north and northeast are separated from the campus by Gerald Ford Drive. No sensitive uses adjoin the campus.

Impact Criteria

Construction activities are considered to have a significant impact if they substantially disrupt or interfere with day-to-day operations of surrounding land uses, substantially affect sensitive uses, or create public health and/or safety hazards.

Environmental Impact

Construction Effects on Air Quality

The existing air quality in the project area is discussed in Section 3.5, Air Quality and Greenhouse Gases (GHG). Air pollutants emitted by construction activities include oxides of nitrogen (NO_x), and reactive organic gases (ROG). In addition, grading and demolition activities release dust and fine particulate matter less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$) into the atmosphere.

Criteria Pollutant Emissions

Construction emissions, including demolition and grading, were calculated using the current version of the California Emissions Estimator Model (CALEEMod), version 2016.3.1. The model uses current CARB emission factors for automobile and truck emissions and EPA emission factors for equipment emissions and fugitive dust emissions. The modelled "worst-case" peak day construction emissions are calculated based on the maximum daily emissions for each construction phase, which are added together and the highest daily emissions from the combined overlapping construction phases is reported. For fugitive dust calculations during grading, the maximum number of acres graded in a day is determined by the number of pieces of grading equipment which is assumed to operate continuously for 8 hours. The estimated peak day emissions are summarized in Table 22. The worksheets and calculations are included in Appendix F.

Table 22. Estimated Peak Day Criteria Air Pollutant Emissions from Construction

	Reactive Organic Gases (ROG)	**Oxides of Nitrogen (NO_x)**	**Carbon Monoxide (CO)**	**Fine Particulate Matter (PM_{10})**	**Fine Particulate Matter ($PM_{2.5}$)**	**Max GHG (metric tons /year)**
Daily Maximum	217	95	69	13	8	6,216
SCAQMD Thresholds	75	100	550	150	55	
Exceed Threshold?	**Yes**	**No**	**No**	**No**	**No**	

As shown, short-term maximum peak day construction emissions associated with the construction of future campus facilities and improvements will be above the South Coast Air Quality Management District (SCAQMD) threshold amounts for ROG. Therefore, this impact is considered to be significant.

Toxic Air Pollutants

Toxic air contaminants are a group of pollutants defined by the Federal Clean Air Act and the California Health and Safety Code. Federal, State, and local governments have implemented a

number of programs to control air toxic emissions. For example, the Federal Clean Air Act regulates emissions of nearly 200 hazardous air pollutants. The California Legislature has implemented regulation to limit toxic emissions, such as the Tanner Toxics Act (AB1807), the Air Toxics Hot Spot Assessment Program (AB2588), the Toxics Emissions Near Schools Program (AB305), and the Disposal Site Air Monitoring Program (AB374).

All construction activities will comply with existing rules and regulations concerning toxic air pollutants. As future campus development, pursuant to the Master Plan, will not affect existing buildings on campus that were constructed between 2002 and 2008, there will be no demolition activities that may generate asbestos emissions or emissions associated with lead-based paint and other toxic materials.

The California Air Resources Board has identified diesel particulate emissions as carcinogenic air toxics. No safe threshold for the emissions has been established. However, the amount of diesel emissions associated with new facility construction within the campus will be relatively small and will not involve massive or prolonged operations of diesel trucks or equipment. While diesel exposure from construction of facilities and infrastructure improvements at the campus is not expected to be a significant impact, nonetheless, because there are existing residences nearby and students present on campus, mitigation measures have been identified to reduce diesel particulate emissions from construction equipment.

Construction Effects on Water Quality

Construction operations can impact water quality in several ways. First, to comply with SCAQMD guidelines, most construction sites are required to be watered to reduce emissions of PM_{10}. This water can result in runoff from the site laden with construction debris (including trash, cleaning solvents, cement wash, asphalt and car fluids like motor oil, grease, and fuel) and sediment, potentially affecting local waterways. Second, during rain storms, stormwater runoff from construction sites can carry construction debris and sediment into local waterways. Third, construction activities, although not anticipated, can result in dewatering, which can carry contaminants into nearby waterways.

For construction in areas of 1 acre or more in size, current regulations require design and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on the implementation of Best Management Practices (BMPs). SWPPPs may include the following BMPs to reduce impacts on water quality:

- Schedule excavation and grading work for dry weather
- Use as little water as possible for dust control
- Never hose down dirty pavement of impermeable surfaces where fluids have spilled
- Utilize re-vegetation, if feasible, for erosion control after clearing, grading, or excavating
- Avoid excavation and grading activities during wet weather
- Construct diversion dikes to channel runoff around the site, and line channels with grass or roughened pavement to reduce runoff velocity
- Cover stockpiles and excavated soil with wraps or plastic sheeting
- Remove existing vegetation only when absolutely necessary

- Consider planting temporary vegetation for erosion control on slopes where construction is not immediately planned

With implementation of these BMPs impact will be less than significant, and no additional mitigation measures beyond compliance with existing regulations are required.

Noise

Construction activities will result in a temporary increase in ambient noise levels in the vicinity of each individual construction site. During the construction period, noise from heavy equipment, power and air tools, compressors, trucks, and other noises from loading and unloading will occur with varying frequency and intensity. At a distance of 50 feet from the noise source, construction equipment noise levels (principally from engine exhaust and engine noise) range from 75 to 95 dB(A) for tractors, up to 95 dB(A) for construction trucks, up to 88 dB(A) for concrete mixers, and up to 87 dB(A) for compressors. These temporary noise levels will not be continuous but will vary as equipment is used for varying lengths of time throughout the construction period. During grading and other construction, peak noise levels at 50 feet range from 75 to 90 dB(A), with occasional higher peaks.

Noise levels fall substantially with increasing distance from the noise source, both as a result of spherical spreading of sound energy and absorption of sound energy by the air. Spherical spreading of sound waves reduces the noise of a point source by 6 decibels for each doubling of distance from the noise source. Absorption by the atmosphere typically accounts for a loss of 1 decibel for every 1,000 feet. Thus, high levels of construction noise usually are limited to the immediate vicinity of construction activities. However, since construction activities of some specific facilities or improvements could be audible at the nearby campus facilities or other campus sensitive uses, mitigation measures have been identified to reduce this significant impact.

Traffic/Circulation

Construction activity will add trucks and construction equipment to streets in the area. Haul trucks and heavy equipment usually travel more slowly than other traffic on the street network and require more time to enter and exit traffic flows. When heavy equipment enters or exits a construction site, it may interrupt vehicular or pedestrian traffic. Construction activities on campus will involve the use of trucks, usually for short periods of time, to haul away construction debris and deliver construction materials. These trucks and equipment may cause localized congestion at some locations in the surrounding area, which is a potentially significant impact if not properly mitigated.

As campus students walk from one building to another throughout the day, construction activity for specific facilities could adversely affect pedestrian flows in some areas of the campus. Mitigation measures have been identified to reduce these potential impacts.

Solid and Hazardous Waste

Construction of new facilities and associated infrastructure improvements will generate construction materials waste. Even though the construction of individual campus facilities and infrastructure improvements will be phased over the 20-year span of the Master Plan - thus representing relatively small amount of construction at any given time which do not involve massive construction activities that could generate significant amounts of solid waste, mitigation measures have been identified to reduce this potential impact.

As future campus development pursuant to the Master Plan will not affect existing buildings on campus, there will be no disposal of demolition materials that may contain hazardous substances.

Mitigation Measures

Compliance with existing regulations and requirements will ensure that impact on water quality will be less than significant and no additional mitigation is required. The University will implement the following mitigation measures to reduce identified significant impacts by imposing conditions on the construction contractor.

Air Quality and GHG

All construction activities will proceed in compliance with the SCAQMD Rule 403 – Fugitive Dust and Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources, which includes preparation of a Fugitive Dust Control Plan. Following the SCAQMD approval, the Plan will be implemented throughout the construction period. The Plan will specify the Best Management Practices and control measures that will be used during construction, such as watering exposed surfaces; applying soil stabilizers to disturbed inactive areas; quickly replacing ground cover in inactive areas; covering all stockpiles with tarps or plastic sheeting; watering all unpaved haul roads; reducing speed on unpaved to below 15 miles per hour; and ceasing grading and other high-dust activities during high wind conditions, among many others.

In addition, the University will implement the following mitigation measures to reduce identified significant impacts by imposing conditions on the construction contractor.

1. Diesel particulate filters are installed on diesel equipment and trucks.
2. All construction equipment will be properly tuned.
3. To reduce emissions from idling, the contractor will ensure that all equipment and vehicles not in use for more than 5 minutes are turned off, whenever feasible.
4. Architectural coatings with no more than 50 grams/liter of VOC that are in compliance with SCAQMD Rule 1113 – Architectural Coatings, will be utilized.
5. Construction of new facilities will utilize materials that do not require painting or will utilize pre-painted construction materials to the extent feasible.
6. Low VOC-content asphalt and concrete will be utilized to the extent possible.

7. The University will continue to comply with SCAQMD Rule 1403 (Asbestos Emissions from Renovation/ Demolition Activities) and other pertinent regulations when working on structures containing asbestos, lead, or other toxic materials.

The University will implement the following measures to protect students present at campus.

8. As appropriate, outdoor activities at the campus will be limited during high-dust and other heavy construction activities, including painting.
9. Throughout the construction period of individual facilities and improvements in close proximity to campus academic facilities, health and wellness facilities, and/or other sensitive uses on campus, ventilation systems in those facilities will be tested more frequently to provide for the maintenance schedule that ensures proper ventilation.

Noise

10. Muffled heavy construction equipment will be used.
11. Construction staging areas will be located as far as possible from campus academic facilities, health and wellness facilities, and other places where students gather.
12. The contractor will ensure that each piece of operating equipment is in good working condition and that noise suppression features, such as engine mufflers and enclosures, are working and fitted properly.
13. The contractor will locate noisy construction equipment as far as possible from nearby sensitive uses.
14. Construction hours will be consistent with the City of Palm Desert's Construction Work Hours[27] which prohibits construction activities on weekdays from 5:30 PM to 7:00 AM from October to April, and from 7:00 PM to 6:00 AM from May to September. Construction is prohibited from 5:00 PM to 8:00 AM on Saturdays, and is not allowed on Sundays and government holidays.

Traffic and Parking

15. A flag person will be employed as needed to direct traffic when heavy construction vehicles enter the campus.
16. Construction trucks will avoid travel on residential areas to access campus and use the City of Palm Desert designated truck routes to travel to and from campus.
17. Construction-related truck traffic will be scheduled to avoid peak travel time on the I-10 freeway as feasible.
18. If major pedestrian or bicycle routes on campus are temporarily blocked by construction activities, alternate routes around construction areas will be provided, to the extent feasible. These alternate routes will be posted on campus for the duration of construction.
19. If any bus stop on campus is obstructed by construction activity, the University, in cooperation with the transit service providers, will temporarily relocate such transit facility on campus as appropriate.

[27] http://www.cityofpalmdesert.org/departments/planning/code-compliance-/construction-work-hours

Solid and Hazardous Waste

20. Construction inert materials, including vegetative matter, asphalt, concrete, and other recyclable materials will be recycled to the extent feasible.

Level of Impact After Mitigation

Compliance with existing regulations and implementation of the identified measures will reduce construction impact on waste facilities to a less than significant level. However, even with incorporation of identified feasible mitigation measures, peak emissions of ROG could remain above the threshold of significance amounts and thus, this impact is considered significant and unavoidable. The impact of noise from construction activity on the campus' closest sensitive uses in the vicinity of some construction sites of new facilities, albeit reduced and intermittent, could remain significant and unavoidable.

4.0 Cumulative and Long-term Effects

Cumulative Effects

The CEQA Guidelines (Section 15355) define a cumulative impact as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The Guidelines [Section 15130(a)(1)] further state that "an EIR should not discuss impacts which do not result in part from the project."

Section 15130(a) of the CEQA Guidelines provides that "[A]n EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable..." Cumulatively considerable, as defined in Section 15065(a)(3), "means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

An adequate discussion of significant cumulative impacts requires either (1) "a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (2) "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact." Due to the long-term nature of the Master Plan, this cumulative impact analysis evaluates impacts based on a long-term area-wide regional growth, including future development within the City of Palm Desert pursuant to the City's General Plan corresponding to the Master Plan's 20-year planning horizon.

The CEQA Guidelines recognize that cumulative impacts may require mitigation – such as new rules and regulations that go beyond project-by-project measures. An EIR may also determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The Lead Agency must identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable [CEQA Guidelines, Section 15130(a)(3)].

Aesthetics

The Master Plan will result in compact development of student housing and new academic facilities within the campus. All campus facilities will be designed and constructed in accordance with the Master Plan guidelines.

The Master Plan Design and Landscape Guidelines include extensive requirements and recommendations (including form, mass, scale, color, landscape forms, plant palette, etc.) that ensure aesthetic quality, and compatibility with both the existing campus facilities and with the greater Sonoran desert environment. Lighting of new campus facilities will be energy-efficient, shielded, focused away from the surrounding areas, and will be contained within the campus land area with no spillover effects. Overall, the Master Plan will enhance the visual and aesthetic character and quality of the campus.

The City of Palm Desert noted that it will need to make sure it appropriately plans for enough land in the vicinity of the universities (PCD and UCR Palm Desert) to accommodate new students, faculty, and university supportive businesses. Additionally, it will be very important for the City to ensure that all new development in the area is interconnected so as to form a cohesive university area[28]. Furthermore, all future development within the City in the off campus surrounding area will comply with the City's planning and zoning regulations, including design and lighting, ensuring no significant cumulative aesthetic impact.

Biological Resources

The Master Plan provides a strategic approach to the long-term campus development which utilizes the vacant campus land east of the existing campus facilities to provide all needed facilities within a compact, approximately 85-acre area and preserving the remaining land within the approximately 169-acre campus area in its existing condition of natural desert setting. Based on biological surveys of the campus, there are no special-status species or habitats on campus, and no significant cumulative impact on biological resources will occur as a result of the Master Plan.

Cultural Resources

Historic Resources

The Palm Desert campus currently consists of four existing facilities and a utility substation. All existing buildings were constructed between 2002 and 2008 and none of the buildings has been identified as a historic resource. Therefore, campus development pursuant to the Master Plan will not result in a cumulative impact to historic resources.

[28] City of Palm Desert General Plan update, November 2016.

Archaeological Resources

The CHRIS records search identified two archaeological surveys carried within the campus area one consisted for a street improvement project and one consisted for the CSU San Bernardino Coachella Valley Campus. None of the resources identified within the Master Plan project area are eligible for the California Register of Historic Resources.

No previously recorded cultural resources are located within the campus area. Nonetheless, precautionary mitigation measures have been identified to reduce the potential impact on such previously unknown archaeological resources. Similarly, if there are such resources identified within the sites of future development in the area surrounding the campus in the City of Palm Desert, those future projects will implement similar mitigation measures in compliance with existing laws and regulations, including the City requirements, to ensure potential impact is reduced to a less than significant level. With these measures, potential cumulative impact will be reduced to a less than significant level.

Native American and/or Tribal Cultural Resources

A search of the Sacred Lands Files requested from the NAHC failed to identify the presence of Native American cultural resources within the campus study area planned for future development pursuant to the Master Plan. Nonetheless, mitigation measures have been identified to ensure that future campus development pursuant to the Master Plan will not significantly affect a previously unknown tribal cultural resource. Other future development within the area and the region that involves construction or deconstruction will be required to follow similar procedures and, if there are such resources identified within the sites such future development, mitigation measures will be implemented in compliance with existing laws and regulations to ensure that potential impact is reduced to a less than significant level. With compliance with these existing requirements, cumulative impact is anticipated not to be significant.

Paleontological Resources

Although, there are no known paleontological resources within the campus, the soils of the campus have high paleontological sensitivity, which s means that scientifically significant fossil specimens could be uncovered by construction activity on campus. Therefore, mitigation measures have been identified to reduce this potential impact to a less than significant level. Other future development within the area and the region that involves construction on soils with high paleontological sensitivity will be required to follow similar procedures and, if there are such resources identified within the sites such future development, mitigation measures will be implemented in compliance with existing laws and regulations to ensure that potential impact is reduced to a less than significant level. With compliance with these existing requirements, cumulative impact is anticipated not to be significant.

Traffic and Circulation

The traffic analysis in this EIR (see Section 3.4) addresses both project-specific and cumulative traffic and circulation impacts that account for background traffic associated with long-term regional growth and addition of traffic generated by related projects. At project buildout, when the University enrollment reaches 8,000 FTE students, the project's contribution to traffic will

result in significant cumulative traffic and circulation impact at one intersection. With implementation of the identified mitigation measure, this impact will be reduced to a less than significant level.

Similarly, at buildout, the project's contribution to future traffic volumes will result in significant cumulative impact at 8 freeway segments along I-10 freeway. Mitigation measures available to reduce these impacts to a level below significance would require complete reconstruction of the I-10 freeway to add travel lanes and upgrade the deficient ramp locations. Since the freeways in the study are interconnected systems, it would not be possible, nor effective, to provide isolated spot improvements of one segment of the freeway where deficient operations are observed. Thus, mitigation requiring the University to widen a major regional freeway is not considered feasible. Cumulative impact at the identified freeway segments will be significant and unavoidable.

The Master Plan provides for adequate parking for campus activities and the gradually growing student enrollment, increasing from 350 parking spaces to approximately 4,000 parking spaces. Provisions of these facilities will work to preclude potentially significant cumulative parking impact off-campus.

Air Quality and Greenhouse Gases (GHG)

As discussed in this EIR (Section 3.5, Air Quality and Greenhouse Gases (GHG)), the implementation of the Master Plan together with future growth within the surrounding areas and the region will result in additional vehicle trips and the resultant air pollutant emissions within the South Coast Air Basin. Operational emissions, primarily from vehicular trips associated with growth in student enrollment on campus will exceed the SCAQMD daily threshold amount for NOx, resulting in a significant unavoidable impact.

Region-wide implementation of local and regional growth management policies, a reasonable jobs/housing balance, new technologies (e.g., in vehicle emission control equipment and fuel), and programs to encourage alternative modes of transportation, including public transit, will work toward attaining long-term emissions reductions. However, even with full implementation of those measures, the cumulative impact will be significant.

Noise

As discussed in this EIR (Section 3.6, Noise), the implementation of the Master Plan together with future growth within the surrounding areas and the region will result in additional vehicle trips and overall increase in traffic noise levels. At buildout, the project's contribution to the noise levels, together with the long-term regional growth, will result in a cumulative increase in noise levels ranging from 0.8 dBA to 4.9 dBA. The increase in noise levels will result in significant cumulative noise impact at two study roadway segment along Frank Sinatra Drive between Portola Avenue and Cook Street and between Cook Street and Gerald Ford Drive. No direct feasible mitigation measures are available to reduce the cumulative noise impacts. Most of the residential areas already have 6- to 8-foot noise barriers in place to help reduce traffic noise, and additional sound barriers will not be feasible, due to the need for access to and from the roadways. Therefore, the cumulative noise impact is considered significant and unavoidable.

Fire and Police Protection Services

Cumulative future growth will incrementally increase demand for fire protection services. The Master Plan concept envisions a structured framework that grows from the existing campus to the east, providing a dense, compact campus. The University, City of Palm Desert, Riverside County, and surrounding cities review fire protection issues regularly to ensure adequate levels of service. In addition to incorporating fire safety features in design and operations of its campus facilities, the University will continue to educate students, faculty, and staff to increase awareness about fire prevention and emergency preparedness, and will continue to cooperate with the Riverside County Fire Department to minimize demand for service. Furthermore, the City of Palm Desert plans to construct a new fire station adjacent to the Palm Desert campus to provide additional fire protection coverage for the foreseeable development in the vicinity, including development of the campus.[29] Continued oversight of fire protection services together with adequate fire station facilities - including the new fire station adjacent to the campus, will ensure the impact will be less than significant.

The City of Palm Desert Police Department is operated by Riverside County Sheriff Department (RCSD) and currently polices the Palm Desert campus. The gradual growth in student enrollment on campus pursuant to the Master Plan and future development within the surrounding areas will incrementally increase demand for police protection services.. Pursuant to the Master Plan, a new University Police and Transportation Office will be established on campus that will provide increased police protection services minimizing the gradual increase in demand. The new University Police and Transportation Office will review police protection needs and resources regularly to ensure appropriate levels of service. In addition to incorporating safety features in the design and operation of campus facilities, the continued oversight of police services, including the provision of resources for the University police and cooperation in mutual aid agreements with the City of Palm Desert Police Department and Riverside County Sheriff Department, will ensure a less than significant cumulative impact.

Utilities and Service Systems

Water

The campus development pursuant to the Master Plan includes implementation of a wide-range of water conserving strategies, including water-efficient landscape with drought-tolerant native plants. Furthermore, the Master Plan's Sustainability Guidelines include a wide range of water conservation programs and measures, with high water efficiency in indoor building design and in landscape design and renovation, Water saving strategies include using no potable water for non-potable uses, using recycled and reclaimed water for irrigation (on drought tolerant landscaping), and using water conserving plumbing fixtures.

A Water Supply Assessment (WSA) was prepared for the Master Plan. The Coachella Valley Water District approved the WSA and determined that there will be sufficient water supplies to

[29] City of Palm Desert General Plan, Police and Fire Protection Element, 2004

meet the Master Plan demand, as well as the demand of other future development within the CVWD service area. Therefore, cumulative impact on water supply will be less than significant.

Pursuant to the Master Plan, the existing water infrastructure on campus will be expanded and improved as necessary to serve the new facilities developed. The Master Plan provides for an integrated water system approach that can be implemented over time that will implement water conservation designs, features, and sustainable water management to help conserve water and plan for a "future ready" campus at every phase of development. In addition, the University will be responsible for payments of all legally required capital facilities fees pursuant to and in compliance with the California Government Code Section 54999, including connection fees and user fees. Similarly, future development within the surrounding areas within the City of Palm Desert will be required to provide all necessary onsite improvements in compliance with existing City regulations including any mandated water conservation measures and payments of connection fees and user fees. With these components and payment of all legally required capital facility fees, cumulative impact will be less than significant.

Sewer

The Master Plan and future development within the surrounding off campus area will result in increased generation of sewage flows. The campus is located next to a rapidly developing area of the City of Palm Desert. Implementation of water conservation measures in campus development and operations pursuant to the Master Plan, and by future development in the surrounding off-campus area will continue to work to reduce wastewater flows. The Master Plan includes new sewage infrastructure on campus accommodating wastewater flows from new facilities. Off-campus development projects will be required to provide all necessary onsite improvements in compliance with existing City regulations and contribute to area-wide improvements. With the implementation of the required improvements, cumulative impact will be less than significant.

Stormwater Drainage

The existing storm drainage system for the campus will be augmented with new storm drain piping extensions constructed to connect the new buildings to meet their drainage needs. Service laterals will be sized based on the function and size of buildings planned pursuant to the Master Plan. Some of the existing storm drain lines will be relocated to accommodate new buildings.

The Master Plan provides for sustainable design features and enhancement of open space and parking areas on campus such as bioswales and storm water retention areas, which will reduce stormwater runoff and improve stormwater quality. All future development will implement of most current stormwater requirements mandated by NPDES and other stormwater regulations to improve water quality. With the implementation of the Master Plan's sustainable features and measures that reduce stormwater generation, and mandatory compliance with existing regulations, which include payment of all legally required capital facilities fees, including connection fees and user fees, by all future off campus development within the area will reduce cumulative impact on the regional stormwater system and infrastructure to a less than significant level.

Solid Waste

The University is committed to a campus-wide consolidated waste management program which has resulted in diverting up to 61% of waste from landfills through recycling and other waste diversion measures. In addition, the University has set a zero waste campus goal. With implementation of the Master Plan's sustainability goals, programs and features, more than 80% of waste will be diverted from landfills. With this waste diversion program, which includes providing dedicated bins in high-generation areas, recovery of recyclable materials is increased, contamination from liquid residues to recyclable paper products in the dry commingled recycling program is reduced, and redemption fund revenues are captured to help maintain and grow waste management programs on campus. The Master Plan's solid waste represents a very small fraction, less than 0.0005% of the landfill capacity in the County of Riverside. Other future off campus development will be required to comply with the City of Palm Desert continuing implementation of waste-reduction programs to reduce solid waste disposal to landfills. With these programs the potential cumulative impact will be reduced to a less than significant level.

Short-term Construction Impacts

Construction activities associated with the Master Plan will result in significant, albeit short-term and intermittent, air pollutant emissions and noise even with full implementation of all mitigation measures identified in this EIR. Over the 20-year Master Plan timeframe, potential overlap of construction of campus facilities with construction of some of the future off-campus development may occur. Thus, the combined construction effects could be cumulatively significant even with full implementation of the mitigation measures identified in this EIR as well as those required of other off-campus future development projects in the surrounding area.

Growth-Inducing Impacts

The CEQA Guidelines [Section 15126.2(d)] require a discussion of "… ways in which the proposed project could foster economic or population growth … in the surrounding environment," including the project's potential to remove obstacles to population growth. For example, the extension of infrastructure may encourage or facilitate other activities that could significantly affect the environment.

In compliance with the State Legislative mandate expressed in the State Master Plan for Education, the CSU system is obligated to continue to accommodate all fully eligible graduates from California high schools and community college transfer students. To do so, CSU San Bernardino, Palm Desert campus is responsible to accommodate the 8,000 FTE student enrollment in response to future demand for higher education within California. The Master Plan is designed to accommodate additional students generated by growth within the Coachella Valley region and beyond, and thus by itself will not induce population growth in the region. Thus, the Master Plan will not foster economic or population growth beyond the growth already anticipated in the region.

Significant Irreversible Effects

Implementation of the Master Plan will commit non-renewable resources during construction and operation. During construction, the use of building materials (e.g., aggregate, sand, cement, steel, glass, etc.) and energy resources (e.g., gasoline, diesel fuel, electricity) largely would be irreversible and irretrievable. Energy would be consumed in processing building materials and for transporting these materials and construction workers to the individual facility sites.

The new buildings at the campus provided pursuant to the Master Plan can be expected to have a life span of approximately 50 to 70 years. Resources consumed during buildout of the Master Plan, (such as fuel, building materials, water, etc.) will be used in quantities proportional to similar development in Southern California. While title 24 (Part 6 of the California Building Standards Code) energy conservation standards are mandatory and will be applied to the construction and operation of all campus facilities, with implementation of the Master Plan's comprehensive sustainability features and programs is anticipated to exceed these standards to a considerable degree. Students, faculty, and employees will consume motor fuel and water; however, these activities are part of normal operations and are not considered a wasteful use of resources. With the Master Plan's comprehensive sustainability features and programs, the use of nonrenewable resources will be substantially reduced, and the consumption of these resources will likely be smaller than, or comparable to, the use of resources for other major universities and colleges throughout the region and the country.

5.0 Alternatives to the Project

The following discussion considers alternative scenarios to the CSU San Bernardino, Palm Desert Campus 2016 Master Plan. Through comparison of these alternatives, the relative advantages of each can be weighed and analyzed.

The CEQA Guidelines state that an EIR need not consider every conceivable alternative to the project [Section 15126.6(a)], or an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative [Section 15126.6(f)(3)]. The Guidelines require that a range of alternatives be addressed "governed by 'a rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The discussion of alternatives must focus on alternatives that are potentially feasible and capable of achieving major project objectives while avoiding or substantially lessening any significant environmental effects of the project [CEQA Guidelines, Section 15126.6(f)].

The primary objective of the Master Plan is to guide the development of the campus to accommodate gradual student enrollment growth by maintaining and enhancing the physical aspects of the campus to meet the needs for growth, while enhancing the quality of campus life. To do so, the Master Plan focuses on the space needed for future academic programs by mapping out a trajectory for growth and change that will enhance the physical campus, reinforce the University's strengths and support the University's mandate to provide high-quality education to a larger student body. Specific goals for the CSU San Bernardino Palm Desert Campus 2016 Campus Master Plan will facility the University's ability to:

- Provide academic facilities and accommodate campus growth to a capacity of 8,000 FTE students
- Support students, faculty and staff with appropriate learning, research recreation and administrative facilities
- Serve as a regional center for intellectual, cultural and life-long learning
- Reinforce the CSUSB's active learning focus by providing opportunities for interactions and collaborations among students, faculty, staff and the greater community
- Support the creation of a range of student learning/research/business incubator type spaces through public-private and public-public partnerships
- Continue to collaborate with local institutions to fully integrate the campus into the physical, social, economic fabric of the local community
- Attract international students to the PDC
- Reinforce positive intrinsic features of the CSUSB PDC site including views to the Indio Hills to the northeast and views of the campus from the I-10 freeway and from off-campus neighborhoods
- Make efficient use of developable campus land and preserve a balance between built-up areas and open space
- Create a series of campus outdoor spaces framed by buildings and protected from extremes of sun and wind that facilitate student interaction, student learning and passive recreation

- Provide appropriate facilities for informal and organized recreation and intercollegiate athletics
- Provide facilities for campus-based and campus controlled student housing to support the campus life and learning experiences for the full range of university students
- Support the creation of residential learning communities on the campus; support the continued use of the campus by commuting students
- Serve as an accessible, safe and attractive campus for students, staff, faculty and the community
- Promote social and economic equity, provide for a range of ways for students and the community to access the campus and its facilities including public transportation and distance learning
- Conserve natural resources while creating and fostering an environmentally, socially and economically sustainable physical and operational campus
- Through a comprehensive approach to sustainability, deepen the stewardship of Palm Desert Campus landscape resources and the local natural environment

The EIR analysis indicates that the implementation of the Master Plan will result in significant and unavoidable impacts with regards to project-specific and cumulative air quality, traffic impact on I-10 freeway, traffic noise, project-specific construction related noise, and short-term cumulative and project-specific peak construction day air quality. All other impacts analyzed in this EIR were found to be either beneficial, less than significant, or can be mitigated to less than significant levels with mitigation measures identified in the EIR. Thus, the following analysis focuses on identifying alternatives that can reduce or avoid the identified significant and unavoidable impacts. Environmental effects after full implementation of mitigation measures are used as a basis for comparison.

Alternatives Considered

The following alternatives to the Campus Master Plan are considered:

Alternative 1: "No Project" alternative required by CEQA
Alternative 2: Smaller Facility Development
Alternative 3: More Student Housing on Campus

Alternative 1: No Project – Continuation of Current Campus Master Plan

The "No Project" alternative, required to be evaluated in the EIR, considers "existing conditions…as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" [CEQA Guidelines Section 15126.6(e)(2)]. Pursuant to this alternative, the current Campus Master Plan would continue to be implemented.

Campus Development: Pursuant to this alternative, development according to the current Master Plan adopted in 2000, would continue, with student enrollment level at the campus capped at 2,500 FTE students. As most of the current Master Plan facilities have already been developed, this alternative would basically retain the existing conditions on campus, i.e. the campus developed with four academic facilities and surface parking within a small area east of Cook Street and south of Berger Circle Drive. Some athletic facilities consisting of tennis courts and baseball/softball diamond could be developed north of Berger Circle Drive, along the campus' eastern boundary pursuant to the current Master Plan. Most of the approximately 169-acre campus land would remain undeveloped under this alternative. No student housing, or new academic and support facilities would be provided, and the campus would remain as a small, commuter satellite location for the CSU San Bernardino main campus.

Also, no infrastructure improvements, enhanced open space and landscaping, stormwater management system, enhanced pedestrian and bicycle circulation, comprehensive sustainability features and programs, and other improvements provided for in the 2016 Campus Master Plan would be provided pursuant to this alternative.

Environmental Effects: This alternative would eliminate new vehicle trips associated with the growth in student enrollment, and the related exhaust emissions, vehicular trips, and vehicular noise. However, since the No Project alternative would not include student housing, new academic and support facilities and other appropriate learning, research recreation and administrative facilities, no potential would be realized for accommodating future enrollment growth and providing facilities for informal and organized learning and recreation activities.

In accordance with the State Master Plan for Higher Education, the CSU system mission is to provide access to fully eligible California schools graduates and community college transfer students. Therefore, if no student enrollment growth is accommodated at the CSU San Bernardino Palm Desert campus, 5,500 additional FTE students projected to seek enrollment would have to be accommodated at other universities elsewhere in Southern California. As a result, this alternative would relocate the environmental effects associated with accommodating those students elsewhere, including vehicular trips and the associated traffic impacts, exhaust emissions and the resultant air quality impacts, and traffic noise, as well as demand for fire and police protection services, water and other public utilities, and others. Overall, these indirect effects of accommodating the students at another locations together with accommodating fewer students at the CSU San Bernardino Palm Desert campus would likely result in either similar or greater overall environmental impacts than those associated with the 2016 Campus Master Plan.

Relation to Campus Master Plan Objectives: The No Project alternative would not achieve the principal objective of the 2016 Master Plan to provide academic facilities and accommodate campus growth to a capacity of 8,000 FTE students through strategic development to the eastwards of the existing campus facilities while allowing flexibility for future adjustments. This alternative would not achieve any of the other major Master Plan objectives, including to support students, faculty and staff with appropriate teaching, research, and administrative facilities; serve as a regional center for intellectual, cultural, and life-long learning; make efficient use of developable campus land and preserve a balance between built-up areas and open space; serve as an accessible, safe and attractive campus for students, staff, faculty and the community; support

the creation of a range of student learning/research/business incubator type spaces through public-private and public-public partnerships; attract international students to the PDC; support the creation of residential learning communities on the campus; and conserve natural resources while creating and fostering an environmentally, socially, and economically sustainable physical and operational campus, among others. With this alternative, no design guidelines, sustainability guidelines, or landscape and open space features and programs would be implemented to provide frameworks and tools needed to achieve the project objectives.

Most of all, the continuation of the current Master Plan is not feasible because it does not provide for the facilities and programs needed to support projected student enrollment that the CSU San Bernardino Palm Desert campus is responsible to continue to accommodate. To adequately support future student enrollment requires providing facilities, improvements, and programs beyond those considered in the current Master Plan.

Alternative 2: Smaller Facility Development

This alternative considers the provision of fewer facilities and improvements on campus.

Campus Development: A smaller project could potentially avoid or substantially reduce some environmental impacts. Reducing unavoidable significant impact on air quality below SCAQMD significance thresholds would require reducing mobile source emissions of criteria pollutants by roughly 65%. To do so, a commensurate reduction in vehicular trips would be required. To achieve this reduction, the University would have to limit growth in student enrollment to approximately 2,400 new FTE students over the current enrollment level, resulting in a total future enrollment level of approximately 3,600 FTE students on campus Pursuant to this alternative, new facilities would also be reduced to less than 350,000 square feet. As with the project, the Master Plan's design guidelines, sustainability guidelines, and landscape and open space features would be implemented.

Environmental Effects: This alternative would reduce long-term emissions of criteria pollutants to below the SCAQMD's daily threshold amounts, resulting in a less than significant impact under the SCAQMD criteria. This alternative would also reduce the peak day construction-related air quality impact to a less than significant level. Even though vehicular trips would be significantly reduced under this alternative, the reduction of 35% in student enrollment level would likely not be sufficient to avoid significant impacts on I-10 freeway, since the freeway is projected to operate at LOS D or below due to ambient traffic growth and traffic generated by other future development in the area. With substantially fewer trips, a significant project-related vehicular noise impact at the Frank Sinatra Drive study segment would most likely be avoided.

Demand for police or fire protection services would be proportionately reduced, and as with the project, impacts would be less than significant. Demand for utilities and service systems would also be proportionally reduced under this alternative, and would continue to be less than significant.

However, as with the No Project Alternative, if 4,400 fewer FTE students are accommodated at the CSU San Bernardino Palm Desert campus, those students would have to be accommodated at other universities elsewhere in Southern California because in compliance with the State Legislative mandate expressed in the State Master Plan for Education, the CSU system mission is to provide access to fully eligible California schools graduates and community college transfer students. As a result, this alternative would relocate the environmental effects associated with accommodating 4,400 FTE students elsewhere, including vehicular trips and the associated traffic impacts; exhaust emissions and the resultant air quality impacts; demand for fire and police protection services; noise; water and other public utilities, and others. Overall, these indirect effects of accommodating more students at another locations together with accommodating fewer students at the CSU San Bernardino Palm Desert campus would likely result in either similar or greater overall environmental impacts than those associated with the Master Plan.

Relation to Master Plan Objectives: This alternative would not achieve major Master Plan objectives of accommodating the future growth in student enrollment within the Coachella Valley region and beyond; serving as a regional center for intellectual, cultural, and life-long learning; attracting international students to the PDC, support the creation of residential learning communities on the campus, or making efficient use of developable campus land and preserving a balance between built-up areas and open space. Therefore, this alternative would fall short of working to fulfill the State Legislature's commitment to accommodating higher education needs of California residents, as well as the University's aims to achieve greater distinction as regional center for intellectual, cultural, and life-long learning, and for campus life and the environment.

Alternative 3: More Student Housing on Campus

Under this alternative, more development would be provided on campus for students, staff, and faculty academic facilities and student housing. As with the Master Plan, the campus enrollment level would reach 8,000 FTE students pursuant to this alternative.

Campus Development: Pursuant to this alternative, student housing with approximately 2,000 new student beds, about tripling the number of student beds provided for by the Master Plan. Other components provided for in the Master Plan would remain the same pursuant to this alternative, including new academic, administrative, athletic, support and other facilities, as well as the implementation of design guidelines, and sustainability and landscape features and programs.

Environmental Effects: Currently, there is no student housing on campus, and all PDC students commute to campus from their places of residence. The provision of on-campus housing would reduce resulting from reduction in vehicular trips generated by 2,000 students who would otherwise live off campus and commute to and from campus. The full build-out of the Master Plan would generate an estimated 15,734 net new daily trips. With 2,000 students housed on campus, this alternative would reduce the net new trips by approximately 10%, to approximately 14,116 net new trips. To further reduce trips, extensive student life amenities would need to be

provided on campus to fully support student residential community, so students would not need to drive off campus to grocery stores, restaurants, convenience stores, and for other daily needs. With 2,000 students housed on campus, this alternative would reduce the magnitude of project-specific traffic on I-10 freeway. However, due to the projected future poor operating conditions and/or the share of campus-generated trips at the I-10 freeway segments, this alternative would not avoid significant impacts at the freeway study locations. Even with the reduced share of peak hour traffic, this alternative would not measurably reduce the unavoidable significant impact on the I-10 freeway.

Even though vehicular trips would be reduced under this alternative, this reduction in daily trips would not be sufficient to avoid the significant long term air quality impact, and this impact would remain significant and unavoidable. Similarly, this reduction in daily trips would not be sufficient to avoid or substantially reduce the cumulative significant traffic noise impact at Portola Avenue to Cook Street and at Cook Street to Gerald Ford Drive study locations. The beneficial impact of reducing commute trips and vehicle miles travelled (VMTs) would be greater under this alternative in comparison with the Master Plan.

Pursuant to this alternative, with more student housing on campus, the demand for fire protection services would increase but as with the Master Plan, impact would be less than significant. Demand for police services would increase in greater proportion but demand would be met with the appropriate staffing and a provision of new on-campus University Police and Transportation Office, pursuant to the Master Plan. Demand for utilities and service systems would increase as well, but with sustainability features, compliance with existing requirements, and payment of all legally required capital facilities, the impact would be less than significant.

With tripling of new student housing facilities on campus, the magnitude of the significant unavoidable construction-related air quality impact would be greater pursuant to this alternative. This alternative would also likely result in development of additional campus land to located student housing facilities, beyond the compact 85-acre portion of the campus land planned for development pursuant to the Master Plan. Other impacts would be similar to those associated with the Master Plan.

Relation to Master Plan Objectives: This alternative would achieve all Master Plan's objectives, including serving as a regional center for intellectual, cultural and life-long learning, achieving the creation of residential learning communities on the campus, and attracting international students to PDC to a greater extent than with the Master Plan.

Environmentally Superior Alternative

Among the alternatives considered, none of the alternatives discussed is considered clearly environmentally superior to the project. Each alternative results in potential impacts, with a number of impacts that may be greater and some impacts that may be lesser than those associated with the Master Plan. Overall, the More Student Housing on Campus alternative could be considered environmentally superior to the project because it would reduce the magnitude of significant unavoidable traffic, long-term air quality, and traffic noise impacts, and would

increase the beneficial effect of reducing student commute trips and associated vehicle miles travelled. However, since funding for tripling the amount of student housing on campus over the life of the Master Plan is not in place, this alternative may not be fiscally viable at this time.

6.0 Responses to Comments

The Draft EIR for California State University, San Bernardino, Palm Desert Campus project was made available for a 45-day public review and comment period pursuant to the State CEQA Guidelines, Sections 15105 and 15087, beginning on October 12, 2017 and ending on November 27, 2017. The University also held a public meeting to receive comments on the Draft EIR on November 15, 2017 on campus at the Mary Stuart Rogers Gateway Building – Oliphant Auditorium. No comments were received at the meeting.

Written comments received during the public review period for the Draft EIR are presented in chronological order by the date of correspondence or receipt of the comment letter. Each comment letter is designated a number, and individual comments within each letter are also numbered. Responses to the comments are provided. Appropriate revisions to the Draft EIR in response to comments and information received are identified by shading the revised text in the Final EIR, as illustrated in this sentence.

Written comments were received from the following persons:

1. Katie Croft, Cultural Resources Manager, Tribal Historic Preservation Office, Agua Caliente Band of Cahuilla Indians, November 7, 2017.

2. Lijin Sun, J.D., Program Supervisor, CEQA IGR, Planning, Rule Development & Area Sources, South Coast Air Quality Management District, November 14, 2017.

3. Mark Roberts, Office Chief, IGR/Community & Regional Planning, State of California Department of Transportation (Caltrans) District 8, November 20, 2017.

4. Scott Morgan, Director, State Clearinghouse. November 28, 2017.

1. Katie Croft, Cultural Resources Manager, Tribal Historic Preservation Office, Agua Caliente Band of Cahuilla Indians (ACBCI), November 7, 2017.

1.1 The ACBCI stated that it has no comments on the Draft EIR, and requested that the University continues providing ACBCI with updates as the project progresses and informing if there are changes to the scope of the project. The University will continue to provide updates and information about any future changes in the project scope.

Comment Letter 1

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

02-029-2017-001

November 07, 2017

[VIA EMAIL TO:Hazhand@csusb.edu]
California State University, San Bernardino
Mr. Hamid Azhand
5500 University Parkway
San Bernardino, CA 92407

Re: Draft EIR - 2016 Palm Desert Master Plan

Dear Mr. Hamid Azhand,

Comment

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Palm Desert Campus 2017 Master Plan project. We have reviewed the documents and have the following comments:

*At this time ACBCI has no comments, but please continue to provide our office with updates as the project progresses. Also, please inform our office if there are changes to the scope of this project. 1-1

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6829. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Katie Croft

Katie Croft
Cultural Resources Manager
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV

2. Lijin Sun, J.D., Program Supervisor, CEQA IGR, Planning, Rule Development & Area Sources, South Coast Air Quality Management District, November 14, 2017.

2.1 Unlike a typical development project, the proposed project is a long-term Campus Master Plan, analyzed in a program EIR. The campus development will be driven by the growth of the student enrollments over the next 19 years, and the campus facilities will be built in response to enrollment growth. As this growth is not linear through the 19 years of the Master Plan's planning horizon, construction of individual facilities cannot be reasonably quantified on a year-to-year basis, and reasonable assumption of a year-to-year combined construction and operational emissions cannot be substantiated. Instead, the EIR analysis used a conservative approach of estimating emissions from the full buildout as the worst-case operational scenario, and a separate theoretical worst-case scenario of a peak day emissions from construction of all planned facilities as one single phase. Therefore, the worst-case air quality effects of implementing the Master Plan were considered, which resulted in identifying the appropriate mitigation measures required to mitigate the identified worst-case significant impacts.

2.2 The feasible recommended mitigation measures have been incorporated in the Final EIR.

2.3 The information about the University compliance with the SCAQMD Rule 403 – Fugitive Dust and Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources has been included in the Final EIR

Comment Letter 2

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL AND USPS: November 14, 2017
hazhand@csusb.edu
Hamid Azhand, Director
California State University, San Bernardino - Facilities Planning, Design and Construction
5500 University Parkway
San Bernardino, CA 92407

Draft Environmental Impact Report (Draft EIR) for the Proposed Palm Desert Campus 2016 Master Plan

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final EIR.

Project Description and Air Quality Analysis
The Lead Agency proposes to develop a Master Plan for the Palm Desert Campus to accommodate the growth of up to 8,000 full-time equivalent students by 2035 (Proposed Project). The Proposed Project would include 1.21 million square feet of new academic facilities, library/media center, student housing, physical education facilities, administrative facilities, parking, and open space. In the Air Quality Section, the Lead Agency quantified the Proposed Project's construction and operational air quality impacts and compared those impacts to SCAQMD's regional and localized air quality CEQA significance thresholds. Based on the analyses, the Lead Agency found that the Proposed Project's operational emissions would exceed SCAQMD's regional CEQA operational significance thresholds for ROG and NOx.

SCAQMD's 2016 Air Quality Management Plan
On March 3, 2017, the SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP)[1], which was later approved by the California Air Resources Board on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment.

As described in the 2016 AQMP, to achieve NOx emissions reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. SCAQMD is committed to attain the ozone NAAQS as expeditiously as practicable. The Proposed Project plays an important role in contributing to NOx emission reduction. Therefore, SCAQMD staff recommends additional mitigation measures to further reduce air emissions, particularly from NOx. Please see the attachment for more information. The attachment also includes comments about the air quality analysis and compliance with SCAQMD rules.

Pursuant to California Public Resources Code Section 21092.5 and CEQA Guidelines Section 15088, SCAQMD staff requests that the Lead Agency provide SCAQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR. Further, when the Lead Agency

[1] South Coast Air Quality Management District. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at: http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan.

Hamid Azhand November 14, 2017

makes the finding that the recommended mitigation measures are not feasible, the Lead Agency shall describe the specific reasons for rejecting them in the Final EIR (CEQA Guidelines Section 15091). SCAQMD staff is available to work with the lead agency to address these issues and any other questions that may arise. Please contact Jack Cheng, Air Quality Specialist, CEQA IGR Section, at (909) 396-2448, if you have any questions regarding the enclosed comments.

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

LS:JC
SBC171012-04
Control Number

2

Hamid Azhand November 14, 2017

ATTACHMENT

Comment

Air Quality Analysis – Overlapping Construction and Operational Impacts

1. The Lead Agency did not analyze a scenario where construction emissions overlap with operational emissions. When overlapping construction and operational activities are anticipated and reasonably foreseeable during the CEQA review for the Proposed Project, SCAQMD staff recommends that the Lead Agency identify the overlapping years, combine construction emissions with operational emissions, and compare the combined emissions to SCAQMD's air quality CEQA operational thresholds of significance to determine the level of significance in the Final EIR. In the event that the Lead Agency, after revising the Air Quality analysis, finds that the Proposed Project's air quality impacts would be significant, mitigation measures will be required pursuant to CEQA Guidelines Section 15126.4. For more information on potential mitigation measures as guidance to the Lead Agency, please visit SCAQMD's CEQA Air Quality Handbook website[2]. 2-1

Additional Recommended Mitigation Measures

2. CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. SCAQMD staff recommends that the Lead Agency incorporate the following mitigation measures in the Final EIR to further reduce emissions, particularly from ROG and NOx. Additional information on potential mitigation measures as guidance to the Lead Agency are available on the SCAQMD CEQA Air Quality Handbook website[3]. 2-2

   a) Improve walkability design and pedestrian network.

   b) Increase transit accessibility and frequency by incorporating Bus Rapid Transit lines with permanent operational funding stream.

   c) Limit parking supply and unbundle parking costs.

   d) Require that 240-Volt electrical outlets or Level 2 chargers be installed in parking lots that would enable charging of NEVs and/or battery powered vehicles.

      Vehicles that can operate at least partially on electricity have the ability to substantially reduce the significant NOx impacts from this project. It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Therefore, SCAQMD staff recommends the Lead Agency require the Proposed Project to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for vehicles to plug-in.

   e) Require use of electric lawn mowers and leaf blowers.

   f) Require the use of architectural coatings (no more than 50 grams/liter of VOC) that are in compliance with SCAQMD Rule 1113 – Architectural Coatings.

   g) Construct or build with materials that do not require painting or use pre-painted construction materials.

[2] South Coast Air Quality Management District. Accessed at: http://www.aqmd.gov/home/regulations/ceqa.
[3] South Coast Air Quality Management District. Accessed at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

3

Hamid Azhand November 14, 2017

Comment

Compliance with SCAQMD Rule 403 and Rule 403.1

3. The Final EIR should include a discussion to demonstrate compliance with SCAQMD Rule 403 – Fugitive Dust and Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources. 2-3

4

3. Mark Roberts, Office Chief, IGR/Community & Regional Planning, State of California Department of Transportation (Caltrans) District 8, November 20, 2017.

3.1 The information that Caltrans had reviewed the Draft EIR and concurs with the results of the study is acknowledged. No response is required.

Comment Letter 3

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
IGR/COMMUNITY & REGIONAL PLANNING
464 WEST 4TH STREET, 6TH FLOOR MS – 725
SAN BERNARDINO, CA 92401
PHONE (909) 383-4557
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

RECEIVED
NOV 26 2017
CSU San Bernardino
Facilities Planning, Design & Construction

November 20, 2017

Mr. Hamid Azhand, Director
Facilities Planning, Design and Construction
California State University, San Bernardino
5500 University Parkway
San Bernardino, CA 92407-2393

Dear Mr. Azhand:

CSUSB Palm Desert Campus 2016 Master Plan
SCH# 201701159
Riv 10-PM 46.90, GTS-08-RIV-2017-00058

Comment

The California Department of Transportation (Caltrans) reviewed the Draft Environmental Impact Report (DEIR) for CSUSB Palm Desert 2016 Master Plan update. The existing campus is bounded by Gerald Ford Dr., Cook St, and Frank Sinatra Dr. in the City of Palm Desert. This Plan will identify and guide the development of the campus to accommodate the future enrollment growth projected at 8,000 by 2035. Added to the existing campus will be new academic buildings, student housing, and new parking lots on 169.4 acres.

Unavoidable significant impacts have been identified in this DEIR to Interstate 10 Westbound/Eastbound ramps. We concur with the improvements as stated on page 90 of the EIR for restriping of the westbound and eastbound approach. 3-1

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact me or Rebecca Forbes at (909) 388-7139.

Sincerely,

MARK ROBERTS
Office Chief
IGR/Community & Regional Planning

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

4. Scott Morgan, Director, State Clearinghouse. November 28, 2017.

4.1 The information that the University has complied with the State Clearinghouse review requirements is acknowledged. No response is required.

Comment Letter 4

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

November 28, 2017

RECEIVED
DEC 04 2017
CSU San Bernardino
Facilities Planning, Design and Construction

Hamid Azhand
California State University, San Bernardino
5500 University Parkway
San Bernardino, CA 92407-2393

Subject: 2016 Palm Desert Campus Master Plan
SCH#: 2017011059

Dear Hamid Azhand:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on November 27, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. 4-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

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Facilities Planning, Design and Construction

SCH#	**2017011059**
Project Title	2016 Palm Desert Campus Master Plan
Lead Agency	California State University, San Bernardino
Type	**EIR** Draft EIR
Description	The 2016 master plan provides a framework for implementation of the University's goals and programs, by identifying needed facilities and improvements to accommodate a gradual growth in student enrollment projected to reach 8,000 full-time equivalent students by 2035 at Cal State San Bernardino Palm Desert Campus.

Lead Agency Contact

Name	Hamid Azhand		
Agency	California State University, San Bernardino		
Phone	909-537-5136	***Fax***	
email			
Address	5500 University Parkway		
City	San Bernardino	***State*** CA	***Zip*** 92407-2393

Project Location

County	Riverside, San Bernardino			
City				
Region				
Lat / Long				
Cross Streets	within CSUSB Palm Desert campus			
Parcel No.	various			
Township		***Range***	***Section***	***Base***

Proximity to:

Highways	10
Airports	
Railways	Amtrak
Waterways	
Schools	various
Land Use	Master plan: various academic, student housing, sport and recreation, support, admin, and other designations

Project Issues	Air Quality; Drainage/Absorption; Flood Plain/Flooding; Noise; Public Services; Sewer Capacity; Solid Waste; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wildlife; Growth Inducing; Cumulative Effects; Tribal Cultural Resources
Reviewing Agencies	Resources Agency; Department of Fish and Wildlife, Region 6; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Board, Region 8; Native American Heritage Commission; Public Utilities Commission

Date Received 10/12/2017 ***Start of Review*** 10/12/2017 ***End of Review*** 11/27/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

7.0 Preparers of the EIR

Lead Agency

The Board of Trustees of the California State University
5500 University Parkway
San Bernardino, CA 92407-2393

Contact Person: Hamid U. Azhand, Director
Facilities Planning, Design and Construction

Phone: (909) 537 - 5136
Fax: (909) 537 - 5903
Email: HAzhand@csusb.edu

Consultant to the Lead Agency

WSP USA
444 South Flower Street, Suite 800
Los Angeles, CA 90071
Phone: (213) 362-9470
Fax: (213) 362-9480

Irena Finkelstein, AICP, Project Manager
Responsibility: Overall preparation and coordination of EIR and environmental analysis

Fehr & Peers
8141 E. Kaiser Blvd. Suite 110
Anaheim, California 92808
Phone: (714) 941-8776
Responsibility: Preparation of traffic study

Terra Nova Planning & Research, Inc
42635 Melanie Place Suite 101
Palm Desert, CA 92211
Phone: (760)-341-4455
Responsibility: Preparation of Water Supply Assessment

SWCA Environmental Consultants
150 South Arroyo Parkway, 2nd Floor
Pasadena, California 91105
Phone: (626) 240-0587
Fax: (626) 240-0607
Alyssa Newcomb, Cultural Resources Project Manager and Michael Cady, Senior Biologist
Responsibility: Preparation of Biological and Cultural Resources Analyses